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February 21, 2005

Mr. John H. Robertus

Executive Director

California Regional Water Quality Control Board – San Diego Region

9174 Sky Park Court, Suite 100

San Diego, CA 92123-4340

2005 FEB 22 A 10:07
SAN DIEGO REGIONAL
WATER QUALITY
CONTROL BOARD

Dear Mr. Robertus:

Subject: TSMC:40-0054.02:dorsk

Testimony Relative to Tentative Addendum No. 5 to Cleanup and Abatement Order No. 92-01,
Mission Valley Terminals, San Diego

I am submitting the attached written testimony on behalf of Shell Oil Products US (Shell) to be considered by the Regional Board at the March 9, 2005 Regional Board Meeting. I am also planning on making a formal presentation at this Board meeting using excerpts from the attached written testimony as well as a few PowerPoint slides. As you can determine from the attached testimony, Shell is renewing its request to be removed as a named party to Cleanup and Abatement Order No. 92-01 including proposed Addendum No. 5 which will be discussed at the Board Meeting on March 9th.

If you or your staff have any questions related to this testimony, please feel free to contact me using my contact information provided above. Your consideration in this matter is greatly appreciated.

Sincerely,

Curtis C. Stanley
Principal Consultant

**Testimony by Shell Oil Company Relative to
Tentative Addendum No. 5 To Cleanup and Abatement Order No. 92-01
Presented at the March 9, 2005 California Regional Water Quality Control Board
(San Diego Region) Regional Board Meeting in San Diego, CA**

This testimony is presented on behalf of Shell Oil Company (Shell) and its various operating entities including Texaco Inc., Equiva Services LLC, Texaco Refining and Marketing Inc., Shell Oil Products US, and Equilon Enterprises, LLC (collectively Equilon) relative to the San Diego Mission Valley Terminal.

Over the past four years, Shell has clearly demonstrated that it should no longer be a party to Cleanup and Abatement Order (CAO 92-01) including subsequent Addenda. Accordingly, as described later in this testimony, Shell has previously requested that the San Diego Regional Water Quality Control Board (Board) approve the "Shell/Texaco Petition Request for Removal From CAO 92-01 submitted December 5, 2003. If the Board believes that a separate Order is needed, Shell requests that a separate Order be issued for the limited and distinct plumes associated with the former Shell lease (now Kinder Morgan) and the former Texaco lease (now Shell).

BASIS FOR REMOVAL FROM CAO 92-01

Shell/Texaco Site Conceptual Model

Following completion of extensive assessment activities in 2001, Shell (Equilon) provided the Board with a comprehensive and accurate understanding of the contamination at the Mission Valley Terminal (MVT) within its Site Conceptual Model (Site Conceptual Model submitted to the Board in November 2001 and is incorporated here by reference). The Board acknowledged these findings as most representative of the facts in correspondence dated July 24, 2003 (see "San Diego Regional Water Quality Control Board Approval of Shell's Site Conceptual Model" section below). During arbitration proceedings, Judge Robert T. Altman (Ret.) the arbitrator and arbitration Technical Master Dr. Richard Jackson also concluded that Shell's Site Conceptual Model accurately represented the true facts regarding the site. The key findings included within the Shell's Site Conceptual Model include:

- The source of the contamination at the Kinder Morgan manifold area is likely the Powerline pipeline failure or untested Kinder Morgan pipelines as indicated by the elevated LIF responses detected in this area (Figure 38), soil staining observed during soil excavations of Kinder Morgan delivery lines, and the similar product type identified in LF-4 as was originally identified in 1991 and 1992 by Freidman & Bruya.
- The source of contamination in the stadium parking lot is the large continuous gasoline plume emanating from the manifold area through buried stream channels as indicated by the CPT/LIF investigations and similar product types detected in NAPL samples collected from the manifold area south to the stadium parking lot (Figures 39-41).

- The Texaco-branded pipelines are not leaking as indicated by hydrostatic testing, tracer testing, pipeline excavations, and soil sampling results.
- Free product associated with the isolated T-09 release was limited in extent and remediated promptly by Texaco. The T-09 release did not commingle with the core plume.
- Hydrocarbon impacts associated with the Texaco plume are chemically different from the core plume (Figures 39-41).
- The contamination on the Shell terminal is limited in extent and nature and does not extend beyond the Mobil terminal.

Arbitration Proceedings “Opinion and Award” (Exhibit A)

In an attempt to blame Shell/Texaco with the core plume, Kinder Morgan filed a lawsuit (March 2000) against Shell alleging that Equilon (formerly the Texaco terminal) was the source of the core plume and that Shell should pay for all of the past and future cleanup costs of the MVT Site, as required by CAO 92-01. At that point in time Kinder Morgan had already settled with Powerine and Mobil and indemnified them for any costs relating to the cleanup of MVT associated with the CAO. While historically SFPP (Kinder Morgan) stated Powerine had created the plume, after settling with Powerine, Kinder Morgan changed its site conceptual model and asserted the holes discovered in Powerine’s pipeline in the manifold area in June 1992 were not the source of the plume.

The competing views were tested in a six-week arbitration before Judge Altman in Los Angeles, California between January and February 2003. Both parties presented evidence, argument, and witnesses to assert why their respective site conceptual model was correct. The Arbitrator ruled in favor of the Shell Site Conceptual Model and stated on March 21, 2003 that:

1. “There is a continuous plume running from the Manifold through the canyon and the west side of the Texaco property and then under the Qualcomm parking lot. There has never been a “gap.”
2. “Shell product, either as NAPL, free or dissolved, has not migrated from the Shell property to the Manifold and has **not** contributed to the core plume.”
3. “Texaco has **not** contributed to the core plume.”
4. “The Texaco plume has **not** merged with the core plume.”

As part of the arbitration, Dr. Jackson was hired (by both parties) as a highly respected and unbiased Technical Master to assist Judge Altman. Dr. Jackson described Shell’s Site Conceptual Model as follows: “The Defense’s model relies, as a well-engineered structure should, on careful analysis of data and material properties.” “Therefore, the Defendant’s Conceptual Site Model - Exhibit 1209 - is accepted as being a reliable portrayal of the contamination events within the Mission Valley aquifer since 1987.” In reference to Kinder Morgan’s Site Conceptual Model, Dr. Jackson stated the following:

“I conclude that the Plaintiff’s argument - that the gasoline contamination beneath the Qualcomm stadium parking lot (QSP) is caused by spills at the Texaco/Equilon facility - is unproven and incorrect.”

Based on these findings the arbitrator ruled in favor of Shell on all causes and actions in the Award as follows:

1. Shell and Texaco had not breached any provisions of their leases.
2. Shell and Texaco have to date, at their own expense, complied with Health Department and Regional Water Board Orders.
3. Kinder Morgan is to take full responsibility for remediation and compliance with all Health Department and Water Board Orders related to the contamination at the Mission Valley Terminal and Qualcomm Stadium including under the Shell and Texaco properties.
4. Kinder Morgan is to indemnify and hold harmless Shell and Texaco for all liability arising from its failure to complete the cleanup work and any failure to comply with past or future Orders of the Health Department and Water Board.
5. Cleanup work at the Shell property is estimated to be minimal. Groundwater monitoring and possible remediation of the tank draw line area are required. Shell is ordered to pay Kinder Morgan \$150,000 to assume all of Shell’s remediation costs.
6. Texaco ordered to pay Kinder Morgan \$565,000 to assume all of Texaco’s remediation costs to remediate the T-09 spill and monitor all of Texaco’s wells.
7. Kinder Morgan ordered to reimburse Texaco for all costs that they incurred remediating the core plume and for the parties to settle remediation costs incurred as a result of the Cost Sharing Agreement.

These rulings were based on the testimony provided by the parties, which clearly demonstrated that the Shell Site Conceptual Model accurately defined the release scenario and hydrocarbon distribution of the core plume as well as the Shell and Texaco plumes. Based on the site data and lack of operation of the groundwater remediation system, the arbitrator assigned the liability associated with the cleanup of the core plume to SFPP/Kinder Morgan.

The following findings of liability were detailed within the arbitrator’s award and judgment and further demonstrate that SFPP/Kinder Morgan is responsible for the core plume cleanup as required by CAO 92-01 and all penalties and fines resulting from Kinder Morgan’s failure to cleanup the plume since 1992.

➤ **Failure to Operate the Remediation System**

“It is also clear that beginning in 1994, and continuing until at least 1998, SFPP/Kinder Morgan’s remediation efforts were an unmitigated disaster. SFPP/Kinder Morgan completely failed to contain the MTBE in the groundwater and permitted it to extend deep into the Qualcomm lot.”

“The un rebutted opinion of Curtis Stanley is that if the 3 pumping wells required by SFPP’s 1992 CAP had been operated as proposed, all of the MTBE in the QualComm lot would have been successfully removed when the groundwater was pumped out and treated”.

“The point however is that the Board ordered SFPP to “prevent off-site migration of either free or dissolved product,” and SFPP agreed to do so by running a pumping system. A company can simply not claim that what it has agreed to do in response to a regulatory agency order is unnecessary and later claim that the resultant consequences were unanticipated.”

➤ Core Plume Distribution

“It is absolutely clear that between 1992 and 1998 every report submitted by SFPP to the Water Board described and mapped a continuous core plume. Nowhere is there a suggestion that Texaco or Shell were responsible for the plume.”

➤ Sources of Contamination

“Further, the most likely sources of the plume appeared to be the manifold area with the untested SFPP lines and the SFPP tank farm – which had shown releases on the soil gas survey.”

“Moreover, it came to light on cross examination that Dr. Bruya was for some reason unaware of a January 1993 report from a Phoenix laboratory showing MTBE in a groundwater sample from R-01, and as previously indicated, the contamination at R-01, in the Arbitrator’s opinion, could only have come from the Manifold.”

“In 1992 SFPP certainly would have liked to assign responsibility for the core plume to Texaco but there was no evidence that Texaco had contributed to the plume.”

At the conclusion of the case, Judge Altman ruled, on March 21, 2003, in part: “SFPP is responsible for all the remediation efforts and for compliance with all Health Department and Water Board Orders relating to the remediation of the soil and groundwater at Mission Valley and Qualcomm. . . . **SFPP assumes both the responsibility and the risk related to all future remediation and cleanup work on or under the Shell and Texaco properties and on or under all properties at the Mission Valley Terminal subject to Kinder Morgan’s control and on or under the entire Qualcomm lot and on or under any locations to which the existing contamination may spread. . . .** SFPP is ordered to perform the cleanup and abatement described above and to indemnify and hold harmless Texaco and Shell for any liability arising out of its failure to do the cleanup work and any failure to comply with past or future Orders of the Health Department and Water Board related to the cleanup work.” (emphasis added)

As a result of the Arbitration Opinion and Award, SFPP/Kinder Morgan is solely responsible for the cleanup of all existing soil and groundwater contamination originating from the Mission Valley Terminal, regardless of its source and regardless of its past or present location, including all soil and groundwater contamination in Qualcomm and in the San Diego River.

San Diego Regional Water Quality Control Board Approval of Shell's Site Conceptual Model (Exhibit B)

Following a review of the conflicting Site Conceptual Models provided by Shell and Kinder Morgan, the Board acknowledged that the Shell Site Conceptual Model accurately represented the release scenario and plume configuration at the MVT in correspondence dated July 24, 2003. The data provided by Shell was consistent with respect to these two issues. The Board based their conclusions on the following:

- “The data show a continuous plume of free product on the water table and/or residual free product in soil extending from the manifold area to the northern portion of the Qualcomm Stadium parking lot. This continuous plume is delineated by the soil gas survey, and the cone penetrometer-laser induced fluorescence survey. Monitoring well data also are consistent with this interpretation.”
- “The Shell/Texaco lines under Friars Road do not appear to be a source of the free product, as these lines tested tight in a recent Tracer Tight test, and in previous line tests. Further, soil and water samples from the area where the lines emerge from under Friars Road do not indicate that free product is leaking from these lines.”

California Superior Court Hearing and Order (Exhibit C)

A subsequent petition by SFPP/Kinder Morgan to overturn the arbitration ruling was heard by California Superior Court Judge Ralph W. Dau on July 11, 2003. In reference to Judge Altman's opinion of Kinder Morgan's key expert in the arbitration (Dr. Hromadka), Judge Dau stated “It is the most astonishing statement of unreliability of expert testimony I think I have ever seen.” Furthermore, the Superior Court ordered that SFPP/Kinder Morgan cleanup the Shell and Texaco properties in accordance with the arbitration ruling and comply with the Board Order to cleanup the core plume in a Judgment dated October 31, 2003. After an off-set for its payment to Kinder Morgan for cleanup of the former Shell and former Texaco sites, Kinder Morgan has paid Shell \$512,000 (including sanctions against Kinder Morgan for an improper attempt to overturn Judge Altman's Award) for costs Shell unnecessarily incurred relating to Kinder Morgan's core plume.

Settlement and Release Agreement (October 2004) Between Shell and the City of San Diego

After the Arbitration Opinion and Award and Superior Court Order, Shell voluntarily approached the city of San Diego for settlement of all potential damages. As part of this agreement, the City of San Diego released Shell from “claims relating to past contamination at or emanating from the former Shell terminal at Mission Valley, the former Texaco terminal at Mission Valley, or the current Shell terminal at Mission Valley.”

CONCLUSIONS

The Board has formally concurred with Shell’s Site Conceptual Model which demonstrates that petroleum hydrocarbons associated with the former Shell (now Kinder Morgan) and former Texaco (now Shell) leases are limited in nature and distinct from the core plume. As a result of the judgment entered by the court, Kinder Morgan is legally responsible for the cleanup of all existing contamination originating from the Mission Valley Terminal, regardless of its source. The results of the investigations undertaken during the past several years establish that the contamination at the former Texaco terminal is in fact not commingled with the core plume. To the contrary, they are separate plumes. The investigations have also demonstrated that Shell is not responsible for the core plume.

Kinder Morgan’s history of noncompliance unfairly exposes Shell and the Pecten trademark to potential liabilities, including poor public relations and bad press. The consequences of Kinder Morgan’s actions, lack of actions, non-compliance and continued ineffective remediation have resulted in damages to Shell/Texaco’s reputation, and increases Shell’s cost of doing business. This is especially critical since Shell has a significant public presence in California and Kinder Morgan does not. Since the Shell Pecten is the most recognizable trademark at the Terminal, we do not want anyone associating Shell with soil and groundwater contamination that is solely the responsibility of SFPP (Kinder Morgan).

As part of the original Order, SFPP (Kinder Morgan) was required to contain the soluble plume and cleanup the NAPL. Separate from the off-site plume, CAO 92-01 required the drafting of a plan to “cleanup the affected subsurface soils and groundwater underlying the Mission Valley Terminal.” Kinder Morgan has failed to even begin to address the contamination in the Mission Valley Terminal. While Kinder Morgan’s initial Corrective Action Plan in 1992 included cleanup plans for the Mission Valley Terminal to be completed by January 1999, the work set forth in the plan was never started. Thereafter, in 1999, when Kinder Morgan submitted its new Corrective Action Plan, it again included cleanup plans for the Mission Valley Terminal, however the work set forth in that plan was never started. Thereafter, in 2003, as part of the arbitration with Shell, Kinder Morgan had TRC Alton draft a plan for cleanup of both the off-site and on-site contamination. However, the plan drafted by TRC Alton was never implemented by Kinder Morgan. The final Award required Kinder Morgan to cleanup the Shell Terminal, however to date no cleanup of the on-site contamination has taken place.

In view of the findings of Judge Altman, the Board, and Judge Dau, Shell renews its request to be removed as a party from CAO 92-01 and all Addenda. To the extent that the Board feels that a separate Order is appropriate, Shell would not object to the issuance of a separate Order. A separate Order (if needed) may also assist the Board in the following manner:

- Proper allocation of resources for the cleanup at the MVT and Qualcomm Stadium.
- A reduction in agency oversight resulting from on-going management of multiple parties in disagreement on site cleanup.
- Focused resources on specific plume cleanup efforts resulting in reduced risk and decreasing cleanup time. The monies paid to Kinder Morgan to cleanup the Texaco and Shell leased areas should be allocated to those cleanup efforts today while the core plume continues to be remediated.

Thank you for your consideration in this matter.

**Testimony by Shell Oil Company Relative to
Tentative Addendum No. 5 To Cleanup and Abatement Order No. 92-01
Presented at the March 9, 2005 California Regional Water Quality Control Board
(San Diego Region) Regional Board Meeting in San Diego, CA**

Exhibit A

1 **Robert T. Altman**
2 **Judge of The Superior Court, Retired**
3 **ADR SERVICES**
4 **1900 Avenue of the Stars, Suite 250**
5 **Los Angeles, California 90067**
6 **Phone: (310) 201-0010**
7 **Fax: (310) 201-0016**

8 **IN THE MATTER OF THE ARBITRATION BETWEEN**
9 **SFPP/KINDER MORGAN AND TEXACO AND SHELL¹**

10
11 SFPP/KINDER MORGAN,
12 Claimants and Counter Respondents

13 v.

14
15 TEXACO AND SHELL,
16 Respondents and Counter Claimants

OPINION AND AWARD

Hon. Robert T. Altman

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18
19 The Arbitrator, having heard the evidence,² considered the exhibits, visited the MVT, read
20 and considered the briefs and heard argument, rules as follows:

21
22
23 ¹ The Arbitrator is aware that Texaco Refining and Marketing, Inc. was the successor in interest to
24 Texaco Inc. (collectively "Texaco"); that Texaco and Shell Oil Company's ("Shell's") leaseholds are
25 geographically separated; that Texaco and Shell entered into a joint venture as Equilon Enterprises,
26 LLC ("Equilon") and that Shell has acquired Texaco's interests and obligations at the MVT and is
27 currently the real party in interest. The Arbitrator is also aware that the MVT was first owned by San
28 Diego Pipeline; that San Diego Pipeline was acquired by SFPP and that in 1998 SFPP was acquired by
Kinder Morgan ("KM"). For purposes of clarity and simplicity the Arbitrator will at times refer to
Shell and Texaco in their individual capacities and at other times refer to them collectively as "Ds."
Similarly, the Arbitrator will at times refer to SFPP and KM in their individual capacity and at other
times refer to them collectively as "P."

² Prior to the commencement of the arbitration hearing, the parties agreed that Dr. Richard Jackson
would serve as the Arbitrator's independent expert. Dr. Jackson accompanied the Arbitrator and
counsel on a visit to the MVT and sat with the Arbitrator throughout the arbitration hearing. During

1 OVERALL VIEW

2
3 The MVT was initially owned by San Diego Pipeline, then acquired by SFPP and in 1998
4 acquired by KM. Beginning in the 1960s, San Diego Pipeline and later SFPP entered into
5 renewable leases with Unocal, Powerine, Shell, Mobil, and Texaco who in turn constructed
6 tank farms and distribution facilities. San Diego Pipeline and SFPP retained control of the
7 Manifold area and developed a tank farm and a distribution facility in order to conduct a third
8 party terminaling business. Subsequent to 1998, KM bought out Powerine and Unocal,
9 assumed their obligations under the 1992 Water Board Order, agreed for a fee to run Mobil's
10 operations and acquired Mobil's third party terminaling business. KM is opposed to Shell,
11 Texaco or Equilon operating a third party terminaling business from the MVT.
12

13 The gravaman of P's 18 causes of action is that Texaco and Shell have violated their Leases,
14 and in the case of Texaco, its Indenture, by failing to accept past and future responsibility for
15 remediating their leaseholds, the Manifold, the canyon between the Manifold and the Texaco
16 property and the Qualcom parking lot. Shell contends that to date it has at its own expense
17 successfully remediated the contamination on its property and it accepts responsibility for
18 cleaning up any remaining contamination thereon. Texaco contends that to date it has at its
19 own expense successfully remediated all of the contamination on its property for which it is
20 responsible and it accepts responsibility for any further remediation that is necessary as a
21 result of the T-9 spill, including responsibility for the MTBE plume under the east side
22 Qualcom parking lot, sometimes referred to herein as "the Texaco plume." Texaco and Shell
23 deny responsibility for any remaining contamination in the Manifold area, the canyon, and
24 except for the Texaco plume, in the Qualcom lot.
25

26
27 the hearing, at recesses and at the end of each session, the Arbitrator sought assistance from and
28 consulted with Dr. Jackson on technical issues. In addition, each evening the Arbitrator prepared
written summaries of the day's testimony and reviewed those summaries with Dr. Jackson. Dr.
Jackson is a truly "independent" expert with tremendous knowledge of and experience with all of the
sciences at issue and he greatly assisted the Arbitrator in understanding and evaluating the evidence.

1 P seeks reimbursement by way of indemnity for all past expenses related to the 1992 Water
2 Board Order and Amendments thereto and for all future costs related to the Order and
3 Amendments. In addition, P seeks to have Texaco evicted from its property for breaching its
4 Lease and Indenture by failing to bear the past and future costs of remediating the
5 contamination it has caused.³ Each side seeks a declaration of its rights and obligations and a
6 remedy consistent therewith. Further, since 2001 each side has borne 50% of the remediation
7 costs. Each wants to be reimbursed for all or a portion of those costs based on the Arbitrator
8 apportioning costs in its favor.

9
10 The clearest way to address the issues before the Arbitrator is to state some of the questions
11 that underlie each side's position and to address those questions by reviewing events
12 chronologically.⁴ A chronological review will demonstrate that many of P's positions are 180
13 degrees opposite from those taken by P from the early 1990s through 2001.

14 QUESTIONS

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16
17 1. Is there a **continuous** plume running from the Manifold through the canyon and the
18 west side of the Texaco property and into the Qualcomm parking lot? Put another way, is there
19 a "gap" in what the Arbitrator will refer to as the "core plume?"

20
21
22
23 ³ To the extent that the UD action was predicated on Ds having violated their leases by assigning their
24 leasehold interests to Equilon without P's permission, that issue was bifurcated and decided in Ds'
25 favor by the trial court and is therefor not before the Arbitrator.

26 ⁴ The parties have compiled literally millions of pages of documents and data. It is impossible for the
27 Arbitrator to refer in any detail to that data or to discuss all of the analysis's and conclusions reached
28 by the experts. Rather, the Arbitrator will address the technical issues and conclusions that he deems
representative. Further, the Arbitrator will of necessity have to omit without discussion issues and
events that one side or the other has deemed significant and will at times have to simply state
conclusions. Further, the Arbitrator would ordinarily refer to Exhibits by number. However, given the
large number of exhibits, the fact that many exhibits appear as both P and Ds exhibits and the absence
of a clerk's exhibit list, the Arbitrator will ordinarily refer to exhibits by name or description. The
Arbitrator is satisfied that given counsels' excellent working knowledge of the exhibits, the parties
will have little difficulty identifying the exhibits to which the Arbitrator refers.

2. Has Shell product migrated from the Shell property to the Manifold or in some other way contributed to the core plume?

3. Understanding that Texaco has accepted responsibility for the Texaco plume, has Texaco contributed to the core plume?

4. Has the Texaco plume merged with the core plume?

1991-1998

At different times in the 1980s Texaco experienced releases within their operations area, e.g. from the 2000 and 4000 gallon tanks. The releases contained both gasoline and diesel. Texaco reported those releases to the Health Department and drilled numerous wells in an attempt to remediate the contamination and prevent product from migrating under the Qualcom lot. Texaco was successful, and by 1995 it was clear that Texaco product had not migrated beyond the Texaco property and Texaco was given a natural attenuation letter. Texaco's efforts and success are in marked contrast to those of SFFP, infra.

In 1991 free product was observed in LF-4 and on 1/3/02 the Water Board issued Order No - 92-01 (the "1992 Order" or simply "the Order") pursuant to which SFPP, Shell, Mobil and Powerine were directed to "immediately immobilize and recover all free product from the affected groundwater zone, and immobilize the dissolved product in the soil and groundwater to prevent off-site migration of either free or dissolved product." The initial completion date was 1/1/96.

Both prior and subsequent to the 1992 Order, SFPP investigated the source and flow pattern of the free product found in LF-4. All of the information obtained by SFPP showed the core plume beginning in the Manifold, continuously migrating downgrade through the canyon and

1 winding up underneath the Qualcomm lot. That was how the plume was described by SFPP in
2 its 4/9/92 and 9/1/92 Site Characterization Reports. Moreover SFPP obtained its information
3 from its own experts, Friedman & Bruya and Simon HydroSearch. Friedman & Bruya
4 initially reported that samples from LF-4 appeared to be the same as samples from T-18 and
5 later reported that samples from LF-4, T-18 and R-9 and R-10 appeared to be the same, all
6 containing approximately 90% gasoline and 10% diesel. Moreover the samples were different
7 from those taken from wells on the east side of the Texaco property. Further, the soil gas
8 survey mapped the plume and was consistent with the gradient and the expected groundwater
9 flow. Further R-01 was directly in the path of the plume and contained NAPL, thus
10 "connecting the dots" between LF4 and T-18. Further, it did not appear likely (or possible)
11 that releases from Texaco's operations area could migrate cross gradient to form the core
12 plume. Further, the most likely sources of the plume appeared to be the Manifold area with
13 its untested SFPP lines and the SFPP tank farm -- which had shown releases on the soil gas
14 survey. (If in fact "proximity" is relevant in determining the source of the plume under
15 Qualcomm stadium, as P has argued when pointing the finger at Texaco; then absent a gap in
16 the core plume, it is similarly relevant when determining the source of the plume in the area
17 of the Manifold.)

18
19 P's current project manager Dirk Cockrum testified that SFPP simply accepted the initial
20 Friedman and Bruya report and thereafter never seriously analyzed the available data. On the
21 contrary, as indicated above, SFPP and its experts carefully reviewed considerable data.
22 Moreover "low to high" readings⁵ on soil gases and product thickness which P now contends
23 are significant were certainly available to Simon HydroSearch in 1991 and 1992

24
25
26 ⁵"Low to high" summarizes P's contention that because soil gas, product thickness and MTBE
27 readings are lower on the west side of the Texaco property than under the Qualcomm parking lot, ipso
28 facto something on the west side of the Texaco property must be the source of the contamination
under the Qualcomm lot. While at first glance "low to high" does appear to support P's contention, the
Arbitrator accepts Dr. Huntley's reasoning and conclusions, infra. That based on the conditions at
MVT, "low to high" is completely consistent with a continuous core plume emanating from the
Manifold.

1 and were apparently of no concern. Further, SFPP was hardly reluctant to point the finger at a
2 tenant, namely Powerine, in assessing responsibility and remediation costs, infra.

3
4 In 1992 SFPP certainly would have liked to assign responsibility for the core plume to Texaco
5 but there was no evidence that Texaco had contributed to the plume. P certainly wanted
6 Texaco on the 1992 Order; however its argument for including Texaco was not based on any
7 theory that there was a gap in the core plume, but rather on the fact that Texaco was then
8 remediating a plume on the east side of its property, and therefore in SFPP's opinion, should
9 be subject to the jurisdiction of the Water Board rather than the Health Department. In short,
10 SFPP could not find a basis for assigning responsibility for the core plume to Texaco. That
11 was not the case however when it came to Powerine.

12
13 In 1992 SFPP ordered all of its tenants to hydrostatically test their lines, choosing however
14 not to test its own lines under the Manifold - despite internal memoranda urging that it do so.
15 All of Texaco and Shell's lines passed testing. In fact, Texaco's 2" gas line passed in both
16 1992 and 1994. As a result of the testing, it came to light that Powerine had two holes in its
17 line in the area where its line was connected to the Manifold. SFPP insisted, and continued to
18 insist until it reached a settlement with Powerine in 1999, that the holes had allowed product
19 to escape and that Powerine was therefor responsible for a substantial portion of the core
20 plume. In letters to Powerine, SFPP accepted approximately 50% of the responsibility for the
21 core plume (consistent with a belief that product in the plume came from its Manifold and/or
22 tank farm) and assigned approximately 40% of the responsibility to Powerine and 10% to
23 Mobil and Shell (consistent with a belief that releases from Mobil and Shell were confined to
24 their respective properties). Using the same information that was available to KM when it
25 submitted its 2001 Conceptual Site Model, SFPP rejected Powerine's argument that the leaks
26 were caused during pressure testing and insisted that the leaks had been going for some time.
27 It rejected Powerine's arguments based on the Powerine inventory records and the
28

1 Multimedia report and asserted that the pressure test results and Seybold and Soma report
2 conclusively established its position.

3
4 On 9/1/92, SFPP submitted its Corrective Action Plan (CAP) to the Water Board. The CAP
5 described and mapped a continuous core plume extending from the Manifold to the Qualcomm
6 parking lot and proposed 3 pumping wells in the lot. There was no suggestion of any gap in
7 the plume, nor was there any suggestion that the plume emanated from any source other the
8 Manifold.⁶ The cost of remediation was estimated to be \$3.4 million.

9
10 It is absolutely clear that between 1992 and 1998 every report submitted by SFPP to the
11 Water Board described and mapped a continuous core plume. Nowhere is there a suggestion
12 that Texaco or Shell was responsible for the plume. Further, SFPP at all times accepted the
13 fact that the plume emanated from the Manifold area and that it and Powerine were the source
14 of the plume. Steve Ferrara's testimony to the contrary was not credible. None of the
15 contemporaneous writings support Mr. Ferrara's understanding of history.

16
17 Without going into any detail, it is also clear that beginning in 1994, and continuing until at
18 least 1998, P's remediation efforts were an unmitigated disaster. P completely failed to
19 contain the MTBE in the groundwater and permitted it to extend deep into the Qualcomm lot.
20 A good part of the failure was due to simple negligence, e.g. the 1994 jet fuel overrun.⁷
21 However, part of the failure may well have been due to SFPP's belief in natural attenuation
22 as a "be all, end all" solution for releases and spills. Scott Kilkenny, who was with SFPP
23 until it was purchased by KM and who is currently KM's Vice President of Environmental
24
25
26

27 ⁶ The first phase of the Plan called for remediation at the south end of the canyon. The second phase
28 called for remediation at the north end. The second phase has never been implemented because the
first phase has not been completed.

⁷ By comparison, Texaco's remediation of the spills occurring prior to 1995 was completely
successful, the Water Board having approved natural attenuation with once a year reporting.

1 Health and Safety, testified that prior to the public's concern with MTBE, it was in many
2 cases unnecessary to pump because NAPL would rarely travel a great distance from its source
3 and the dissolved phase would rapidly biodegrade.⁸ He felt that that was the case at the MVT
4 in the early 1990's; that at the time of the 1992 Order and for years thereafter, no one was
5 concerned with MTBE; and that absent the Board's emerging concern with MTBE in the late
6 1990s, the failure to pump would have been in essence "no harm, no foul." Certainly
7 permitting natural attenuation is a lot less costly than operating and maintaining a pumping
8 system, and absent the unanticipated concern with MTBE, Kilkenny "may" have been correct.
9 The point however is that the Board ordered SFPP to "prevent off-site migration of either free
10 or dissolved product," and SFPP agreed to do so by running a pumping system. A company
11 simply cannot claim that what it has agreed to do in response to a regulatory agency order is
12 unnecessary and later claim that the resultant consequences were unanticipated; otherwise
13 there would be little point in having regulatory agencies or orders. Put simply, "if you live by
14 the sword, you die by the sword." Apparently the Board was of the same mind when in 1998
15 it cited P for failing to remove dissolved product and when in 2002 it issued its Time
16 Schedule Order threatening all parties on the 1992 and 1999 Orders⁹ with a penalty of \$10
17 thousand per day for failure to comply.

18
19 In this case, the unrebutted opinion of Curtis Stanley is that if the three pumping wells
20 required by SFPP's 1992 CAP had been operated as proposed, all of the MTBE in the
21 Qualcom lot would have been successfully removed when the groundwater was pumped out
22 and treated. Therefore, assuming arguendo that all of the MTBE in the core plume could be
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26 ⁸ It should be noted that others involved in environmental remediation, including P's expert Dr.
27 Hutchison, disagree, believing that it is a company's obligation to remove contaminants as rapidly and
28 thoroughly as is feasible, and that by doing so, a company minimizes the risk that a product such as
MTBE will sometime in the future be found to be environmentally unsafe.

⁹With respect to the 1999 Order, it is clear from a reading of the Order that Texaco was added because
of its 1999 release at T-9, **not** because of any finding by the Board that Texaco was responsible for the
core plume.

1 attributed to Texaco, Texaco's liability for causing the core plume would be drastically
2 reduced.

3
4 In 1998 KM purchased SFPP. P has argued that subsequent to the purchase, P's experts
5 reevaluated the data from the early 1990's using more "sophisticated" techniques,¹⁰ and based
6 on better science and additional data, concluded that virtually everything SFPP believed in
7 1992 and accepted for upwards of six years was wrong.

8
9 Ds argue that the data acquired since 1999 proves that the conclusions reached in 1992 were
10 correct and that P is attempting to rewrite history for purposes of this lawsuit. Further that
11 KM brought this lawsuit to avoid paying upwards of \$26 million to complete the remediation,
12 to obtain a windfall by recouping the millions of dollars it and SFPP have already spent and to
13 evict Texaco and Shell and thereby gain a near monopoly of the third party terminaling
14 business in San Diego County.

15
16 There is considerable evidence that D is correct in its assessment of KM's motives,¹¹ and that
17 what KM did was to stake out a position and then find experts who would support that
18 position.

19
20 ¹⁰"Sophisticated" was a term used by the Arbitrator during the hearing to distinguish the
21 methodologies used to analyze data in the early 1990's from the methodologies used to analyze data at
22 the time of hearing. The term was not meant to imply that earlier methodologies were less reliable than
later ones.

23 ¹¹ For example, Scott Kilkenny testified that prior to KM's purchase of SFPP, he aware that the MTBE
24 under Qualcom would have to be remediated, and with this knowledge, he advised the then president
25 of KM that the future cost of remediation would be in the neighborhood of \$10 million. As evidenced
26 by the testimony of P's expert, Dr. Ian Hutchinson, who estimated the future cost of
27 remediation at \$26.16 million, Mr. Kilkenny dramatically underestimated the cost. Attempting
28 to remedy that mistake was certainly motivation enough for bringing this lawsuit. Further,
there is no question but that KM did not want Texaco and Shell competing with it in the
thirty party terminaling business. James Kehlet unqualifiedly admitted this and testified that
when Equilon went into the third party terminaling business, KM's customers wanted to
negotiate a lower price — which is what happens when there is competition rather than
monopoly pricing. He testified that that was why KM refused to consent to Texaco and Shell's
assignment of their leases to Equilon and why KM brought an unlawful detainer suit seeking to
evict Texaco and Shell for making an unlawful assignment. Moreover, notwithstanding the fact
that that the Court found at the bifurcated hearing that KM had no right to not consent to the

1 **1999-THROUGH THE ARBITRATION HEARING**

2 Notwithstanding a correct understanding of what has in fact been SFPP's historical position
3 and an understanding of KM's motives, it is still necessary to compare the scientific evidence
4 presented by P and Ds. A fair way of evaluating the evidence is to compare the testimony of
5 each side's witnesses in three areas, hydrogeology, pipeline testing, and fingerprinting, i.e.
6 organic chemistry. In the Arbitrator's opinion, P's experts in these areas were not testifying
7 as scientists; instead they were testifying as advocates.¹² Their testimony was in every way
8 inferior to the testimony of Ds' experts. In short, Ds' experts were believable; P's were not.

9
10 In the area of hydrogeology, P presented the testimony of Dr. Hromadka and D presented the
11 testimony of Dr. Huntley. In comparing their testimony, the Arbitrator was struck by Dr.
12 Rouhani's testimony to the affect that a scientist is supposed to propose a hypothesis and then
13 objectively test all of the relevant data. He or she is as interested in disproving the hypothesis
14 as in proving it. Only when the data clearly supports the hypothesis can a scientist opine that
15 the hypothesis is correct. In the case of Dr. Hromadka, and for that matter, Dr. Bruya and Dr.
16 Caligiuri as well, the hypothesis was not a hypothesis at all but rather a forgone conclusion
17 that the data was selected to support. For these witnesses, the conclusion determined the data
18 rather than visa versa.

19
20 The Arbitrator found Dr. Hromadka to be everything an "expert" should not be. He was
21 100% biased. He simply would not give a straight answer to any question when the answer
22 might be damaging to P and he repeatedly insisted on arguing P's case despite the
23 Arbitrator's admonitions not to do so. Further, he appeared at times incapable of drawing a
24
25

26 assignment, P has continued to seek eviction as a remedy for failing to remediate the MTBE under
27 the Qualcomm lot.

28 ¹² The Arbitrator of course understands that parties to a lawsuit are going to present experts who
support their view. There is a difference, however, between experts who objectively analyze the facts
and reach conclusions they believe in and experts who simply reach conclusions they feel will satisfy
their employers. Having spent 20 years on the Bench, the Arbitrator believes he can tell the difference.

1 perpendicular streamline.¹³ Further, depending on what suited his purpose, he had
2 underground streamwater confined as though flowing through a straw or spreading out like
3 lake. Further, when geological conditions supported his theories, they were clear as a
4 roadmap whereas when they didn't, they were "complex." Further, he refused to acknowledge
5 the meaning of written statements that were clear and unambiguous and disregarded data that
6 would not support his theories. For example, when asked why he did not consider the
7 hydropunch data taken from the area between the Manifold and the Texaco property, his
8 response was, "I just took the data I wanted." Further, as each of his theories was disproved,
9 he simply came up with another one, seemingly oblivious to the fact that his credibility was
10 being destroyed.

11
12 P's 2001 Site Conceptual Model pointed to Texaco's pipelines and its operations area as the
13 source of the MTBE under the Qualcomm lot. Dr. Caligiuri pointed to the pipelines and Dr.
14 Hromadka to the operations area.¹⁴ Notwithstanding nine years of history to the contrary and
15 the Harding-Lawson report that P had commissioned but chose not to submit to the Board, Dr.
16 Hromadka claimed there was a "gap" in the core plume just north of SFPP-7. However, in
17 order to make his theory plausible, he had to explain how the free phase at R-01 had migrated
18 from the Texaco property rather than from the Manifold.

19
20 At his deposition, Dr. Hromadka testified that the free phase recovered from R-01 had not
21 come from the Manifold but had migrated from the operations area of the Texaco property.
22 When asked how it was possible for free phase to migrate cross gradient and "upstream," he
23 stated that the El Nino rains had permeated the unpaved east portion of the Texaco property

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26 ¹³ Interestingly, Dr. Huntley recalled with genuine disgust a case where in order to support his
27 testimony, an opposing "expert" drew streamlines that wandered to and fro and at times appeared to
make U-turns."

28 ¹⁴ Dr. Hromadka's testimony that the Site Conceptual Model included the vapor recovery tank
("VRT") as a possible source of NAPL was simply untrue. At the time the Model was submitted to
the Board, P was unaware that there had ever been any gasoline in the VRT.

1 but not the paved west portion of the property and this had caused the water level to be higher
2 on the east than on the west or north. Dr. Huntley easily disproved this rather peculiar theory
3 by comparing well water data obtained during periods when El Nino rains were the heaviest.
4 The data clearly showed that well water levels at different locations remained the same
5 relative to each other and that the water levels at R-O1 and SFPP 8 were at all times higher
6 than the water levels in the operations area of the Texaco property.

7
8 After his deposition was taken, Dr. Hromadka apparently realized that his theory based on the
9 El Nino rains was not going to work. He thereupon focused on the VRT as the source of the
10 free phase at R-01, thereby avoiding the need to explain how the free phase had flowed west,
11 but still requiring an explanation of how the free phase had flowed north -- once again
12 seemingly upgrade and upstream. On direct examination he testified that the readings at VW-
13 1 showed that a pressure mound had formed which caused the water level in the area of the
14 VRT to be higher than the water level at T-21 and R-01. However, under cross-examination,
15 it became clear that Dr. Hromadka had relied on erroneous information in the electronic data
16 base (apparently SFP-8 data had been mistakenly substituted for VW-1 data) and had not
17 taken the trouble to learn that the erroneous data had been later corrected. Dr. Huntley
18 testified that any hydrogeologist objectively viewing the erroneous data (rather than grasping
19 for data that would help a party to a lawsuit) should have readily seen that the data was
20 erroneous. Further, it is clear from the evidence received at the hearing that the VRT could
21 **not** have been the source of a plume emanating from the Texaco property. The evidence that
22 the tank had in fact leaked was circumstantial at best. Further, there was no evidence that the
23 amount of product in the tank was at any time sufficient to cause a large plume. Further, the
24 samples at taken at F60 and F61 ruled out a significant spill. Further, the tank had never been
25 dug up and repaired, leading to the inference that any leak would be ongoing and would soak
26 the surrounding soil with gasoline.¹⁵ Further, Christine White testified that she monitored the

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¹⁵ The same would be true if there had been a leak in the 8" vapor line. Further, the hydropunch data showed no NAPL in the area of the vapor line as did the 2001 Fugro direct push borings.

1 liquid levels in the tank and found that the tank was not losing liquid.¹⁶ Pointing to the VRT
2 as a source was nothing short of "the last gasp of a desperate man."

3
4 Once Dr. Hromadka realized that he had again erred when he proposed that a pressure mound
5 had altered the water levels, he theorized that product from the VRT had somehow migrated
6 through the soil to R-01. However, he had to abandon that theory when it was pointed out
7 that he had previously testified that there was a 10 to 1 ratio between horizontal and vertical
8 migration of free phase through soil, and using that ratio, the free phase could not have come
9 close to traveling the distance necessary to reach R-01. Further, there was no evidence of a
10 continuous clay layer above the water table along which free phase could travel to R-01.

11
12 Finally, Dr. Hromadka, without any supporting evidence, testified that perhaps the soil
13 conditions between the west area of the Texaco property and R-01 were "unusual."
14 Interestingly, Mr. Cockrum, who has a master's degree in hydrogeology, admitted during his
15 testimony that he could not come up with an explanation of how free phase from the Texaco
16 property could wind up at R-01.

17
18 Dr. Hromadka also maintained that groundwater from the Manifold could travel no more
19 than 400 feet per year, and therefore, there was insufficient time for any release at the
20 Manifold to have migrated 1200 feet to T-18 in three years.¹⁷ Once again, Dr. Huntley put
21 Dr. Hromadka's conclusion to the test. He determined the rate of flow of the groundwater,

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26 ¹⁶ The Arbitrator found Ms. White to be a credible witness and an accurate historian.

27 ¹⁷ The "three years" is based on the idea that MTBE was introduced into California in the late 1980's
28 and therefore any spill of MTBE enriched gasoline at the Manifold that was observed at R-01 in 1991
or 1992 would have had to have reached R-01 in three years -- the three years being at best a rough
estimate. Interestingly in 1992 no one suggested that NAPL was traveling at the "sluggish" pace
proposed by Dr. Hromadka. In fact, SFPP's 1992 CAP suggested groundwater flow velocities far
greater than the velocities suggested by Dr. Hromadka.

1 and using a derived formula, calculated the rate of flow of NAPL as being conservatively¹⁸
2 between 730 and 2500 feet per year, a rate more than sufficient to carry NAPL to the Texaco
3 property within the requisite time period. The Arbitrator is satisfied that Dr. Huntley's
4 calculation was correct.

5
6 Dr. Hromadka also testified that the "low to high" readings on product thickness, MTBE and
7 soil gas readings showed that NAPL under the Qualcom lot had not come from the Manifold.
8 Dr. Huntley, who in general appeared to have a far better understanding of hydrogeology and
9 gasoline migration than did Dr. Hromadka,¹⁹ testified that working geologists understand that
10 the thickness of NAPL in wells proves nothing about the direction of flow or the source of
11 the NAPL. Further, one would expect to find higher concentrations of MTBE under the
12 Qualcom lot because MTBE-rich gasoline is trapped where permeabilities are lower, rather
13 than where they are higher further up the Mission Valley. Further, one would expect soil gas
14 readings to be higher under the Qualcom lot than in the area between the Manifold and the
15 Texaco property because soil gases would be trapped beneath the asphalt surface of the lot.
16 Finally, Dr. Hromadka, who admittedly had not attempted to analyze the source of dissolved
17 phase MTBE at the Manifold as of the time of his deposition, testified that the MTBE at the
18 Manifold had migrated from the Shell property. Suffice it to say, the evidence showed that
19 Shell MTBE did not jump over the Mobil property and P's tanks. Further, Mr. Williams
20 testified persuasively that it was highly unlikely that any MTBE from Shell could have
21 migrated beyond the Mobil property.

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26 ¹⁸ Dr. Huntley eliminated data that would have resulted in the NAPL moving more rapidly because he
27 felt that that data was unreliable. This was in marked contrast to the way Dr. Hromadka and Dr. Bruya
used data, i.e. they eliminated data simply because the data would not support their conclusions.

28 ¹⁹ For example, in suggesting that groundwater moved southwest in the area of the gap and thus would
flow west of the Texaco parking lot, Dr. Hromadka drew streamlines that, consciously or
unconsciously, ignored the fact that in the areas he pointed to, the soil to the southwest was relatively
impermeable compared with the soil to the southeast.

1 With respect to pipeline leaks, P presented the testimony of Dr. Caligiuri while D presented
2 the testimony of Robert Gorham from the Fire Marshall's Office and Brian Payne.

3
4 Overall, the Arbitrator found Dr. Caligiuri's testimony highly suspect. He appeared to
5 unreasonably question any finding that proved that Powerine's lines had been leaking and any
6 finding that proved that Texaco's lines had not been leaking, once again showing P's
7 willingness to rewrite history.

8
9 As previously stated, Dr. Caligiuri drafted the portion of KM's 2001 Site Conceptual Model
10 that pointed the finger of suspicion at Texaco's allegedly leaking pipelines. He suggested that
11 Texaco's lines under Friar's road were a likely culprit, lines which if leaking could release
12 large quantities of product and account for a plume running from the Texaco property to the
13 Qualcomm lot. What is striking is that Dr. Caligiuri persisted in pointing to these pipelines
14 notwithstanding the fact that the lines has passed hydrostatic testing in 1992, 1994, 1995,
15 1997 and 2000, with the 1992 and 2000 tests being 8 hour tests. He also claimed that a 2000
16 Tracer Test was inconclusive because it was a "modified" Tracer Test. (That claim was of
17 course put to rest when the lines passed a standard Tracer Test in 2002.). It is clear that in
18 trying to convince the Board that Texaco's lines were leaking, he applied far more rigorous
19 standards to Texaco's lines than he did to KM's lines. The Board apparently agreed when it
20 recently ordered KM to test its lines under the Manifold.

21
22 In an attempt to cast doubt on the conclusion that Texaco's lines were tight because they had
23 repeatedly passed testing by the State Fire Marshall's Office, Dr. Caligiuri suggested that the
24 Fire Marshall used a "one gallon per hour" test and this allowed for the possibility that large
25 quantities of product could have over time leaked into the soil. He also suggested that the
26 1992 test of Texaco's 2" gas return line indicated a possible leak (although he admitted on
27 cross-examination that that the 1994 test did not appear to indicate a possible leak).

1 Robert Gorham, who supervises the pipeline safety division of the State Fire Marshall's
2 Office, and who was clearly a credible, unbiased witness,²⁰ testified that his office does not
3 apply the one gallon per hour standard in determining whether or not a line leaks. Rather, his
4 office reviews the pressure tests (the same way Dr. Caligiuri does) and determines if the tests
5 indicate a possible leak. Contrary to Dr. Caligiuri's suggestion, he would not find that a line
6 had passed a pressure test because it was leaking less than one gallon per hour. If a line leaks
7 (and a pressure test will pick up a pin hole sized leak), then it doesn't pass.

8
9 Mr. Gorham further testified (contrary to Dr. Caligiuri) that the 1992 test of Texaco's 2" gas
10 return line did not indicate a possible leak. The pressure level was constant throughout the
11 test with the temperature changes being insignificant.

12
13 The Arbitrator heard considerable testimony about whether or not the Powerine line was
14 leaking at the Manifold prior to 1993. In 1993, SFPP argued that a leaking Powerine line at
15 the Manifold was the source of some forty percent of the NAPL that wound up under the
16 Qualcom lot and that the two holes found in the line when it was excavated had been present
17 for some time. At the arbitration hearing, KM argued that Powerine could not have been the
18 source of the NAPL because the Powerine gasoline did not contain MTBE whereas the free
19 phase under the parking lot did and that the two holes found in the line had been blown out
20 during hydrostatic pressure testing.

21
22 P's argument that Powerine could not have been the source because Powerine gasoline did not
23 contain MTBE is not persuasive. There obviously was MTBE in the Powerine tanks at one
24 time because SFPP's 1996 4th Quarterly Report stated that MTBE was found in LF-06, which
25 is just south of the Powerine tanks, and that MTBE was not found in wells upgrade of the
26 tanks. Further, Mr. Holland testified that he didn't begin testing for MTBE until 1992 and

27
28 ²⁰Mr. Gorham testified that Texaco was ordered to test its lines under Friar's Road in 1992, not
because its lines had failed a previous test but because that was when its lines first came under the
jurisdiction of the Fire Marshall's Office.

1 could not state that there was not some MTBE in the "clear" he had been getting from the LA
2 refineries. Further, Mr. Holland trucked in gasoline as well as obtaining gasoline from the
3 SFPP pipeline,²¹ and there is certainly no guarantee that the trucked in gasoline did not
4 contain quantities of MTBE.

5
6 When Dr. Caligiuri testified that the two holes in the Powerine line had been blown out
7 during pressure testing, he did not appear well-informed of SFPP's historical position. For
8 example, he did not appear aware that on 4/14/93 Mr. Ferrara had written a letter to Powerine
9 refuting all of Powerine's arguments that the line had **not** leaked; that Mr. Ferrara had sent
10 Powerine the Seybold report to show that the holes had not been blown out during pressure
11 testing; that SFPP had hired its own expert who refuted Powerine's expert's conclusion about
12 the significance of the quantity of free product in the soil in the area of the leak and that
13 SFPP had felt that Powerine's inventory records were totally unreliable.²²

14
15 Dr. Caligiuri testified that the pressure readings on the 6/3/92 and 6/9/92 Powerine line tests
16 showed that the operator ran down the pressure on the first test because of a valve leak and
17 that the two holes in the line were blown out during the second test. He testified that the
18 initial pressure dip on the second test was due to a "hiccup" by the pump.²³

19
20 The Arbitrator found Brian Payne to be a credible witness and finds his explanations of the
21 pressure readings more likely than those offered by Dr. Caligiuri. Further, he appears to have
22 had more "hands on" experience than Dr. Caligiuri. He testified that if the 6/3/92 test had
23 showed a valve leak, the head pressure would have kept the reading from going down to zero

24
25
26 ²¹ SFPP pointed to this fact when in 1993 it claimed that Mr. Holland's inventory records were
27 inaccurate.

28 ²² It is rather ironic that in an effort to try to avoid the Board ordering it to test its lines beneath the
Manifold, KM offered to submit its own inventory records. The Board did not accept the offer.

²³ All of the pressure readings were available in 1993, i.e., this was not new data, and in 1993 SFPP
presumably regarded the readings as proof that there was a leak.

1 or just above zero as it did when the pump was turned off. Further, he did not believe that the
2 initial pressure dip on the 6/9/92 test was due to a "hiccup," a hiccup that did not occur at any
3 other time during either test. He further testified that if there had been a hiccup, the reading
4 should not have returned to zero. It was his belief that the line was leaking at the time of the
5 6/3 test and that it was not a valve leak as Powerine thought possible. When the operator
6 began the second test, he or she immediately realized that the line was still leaking, pumped
7 the pressure up to over 300 and twice "walked the line" in an attempt to locate the leak.²⁴
8

9 With respect to organic chemistry or "fingerprinting," P presented the testimony of Dr. Bruya
10 while Ds presented the testimony of Dr. Uhler. Dr. Bruya began his testimony by discounting
11 the conclusions he had reached in 1992, hardly a beginning that would inspire confidence.²⁵
12 Further, he selectively chose data (obtained at different times and analyzed by different labs,
13 using different methods and different scales) that would support his conclusions. For
14 example, when he had three reports, two of which had results similar to each other but
15 different from the third, he would sometimes accept the majority results and sometimes the
16 minority result -- depending on which would support his theory. Further, from the moment
17 Dr. Bruya was hired by KM, he was fully aware of the relationship between the data and the
18 wells -- and therefore what data would support KM's theories. Dr. Uhler, at the time he did
19 his analysis, was not aware of where the data came from.²⁶
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22

23 ²⁴ P made the argument that Powerine would not have run product through the line between the first
24 and second tests if there had been a line leak. Powerine's personnel could of course have thought
25 there was a valve leak and believed they had repaired it, they could have thought there was a leak into
a tank rather than into the environment, they could simply have had to move product to satisfy their
customers and hoped that any leak was insignificant and could later be repaired, etc.

26 ²⁵ Dr. Bruya repeatedly stressed that the 90-10 percentages of gasoline and diesel were "approximate."
However, notwithstanding that description, Simon HydroSearch and SFPP concluded that the product
found at LF-04, T-18 and R-09 and R-10 was the same.

27 ²⁶ P has questioned Ds lack of data taken from wells within the canyon area (because there are
28 relatively few wells within the canyon) and questioned Ds' reliance on purportedly "less reliable" data,
e.g. LIF data, hydropunch data, etc. The irony of P's position is that well data is lacking because
SFPP and KM have simply failed to drill the wells. (The same is true for wells within the Manifold
area.) Texaco and Shell by comparison have drilled wells all over their properties.

1 Dr. Bruya's central theme was that all of the product on the entire Texaco property and at R-
2 09 and R-10 was the same and differed from the product found at the Manifold. Dr. Uhler
3 disagreed, concluding that the NAPL at LF-04, T-04, T-18 and R-09 and R-10 was identical
4 and differed from the NAPL found at T-02 and T-03.²⁷ Both experts reached some of their
5 conclusions by analyzing organic lead, MTBE and diesel content.

6
7 With respect to lead, Dr. Bruya testified on direct examination that tetraethyl lead (TEL) was
8 found only at the Texaco facility and at R-09 and R-10, but that it was not found at the
9 Manifold. On cross examination his testimony was shown to be incorrect when Ds pointed
10 out that a 7/11/01 Zimax report stated that TEL had been found at LF-04. Interestingly Zimax
11 was hired by P and provided other data to Dr. Bruya which Dr. Bruya used in forming
12 opinions favorable to P. Yet Dr. Bruya claimed to have no knowledge of the report showing
13 TEL at LF-04.

14
15 With respect to diesel, Dr. Bruya was questioned about the fact that diesel found at T-02 and
16 T-03 was different from diesel found at T-04. Dr. Bruya admitted the difference but said
17 there was that a septic tank on the Texaco property that might have degraded the diesel, a
18 septic tank whose presence and precise location he was able to determine from a single
19 reference on a single diagram. However Dr. Bruya had no knowledge of how much material
20 had flowed from the toilet on the Texaco property into the septic tank or how the contents of
21 a septic tank could degrade diesel.²⁸ Furthermore, the ground water in T-02 and T-03 had
22 been measured and shown to contain dissolved oxygen, which would indicate that any septic
23 tank effluent would have been minimal and unlikely to have had any affect on the diesel. Dr.

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26 ²⁷ Both Dr. Bruya and Dr. Uhler's analysis's were of course far more complex than the examples to
27 which the Arbitrator will refer. For example, Dr. Uhler reached his conclusions based on bulk
28 properties analysis, gasoline diagnostics, diesel diagnostics and gas chromatographic features. Further
each of the foregoing involved multiple comparisons of NAPL from different wells. The Arbitrator
has chosen a few examples that illustrate the two expert's differing conclusions.

²⁸ Dr. Bruya suggested that there might have been mineral oil in the tank. There is no basis for that suggestion.

1 Uhler testified that there was simply no basis for supposing that a septic tank could totally
2 degrade diesel. He further testified that the ratio of diesel to gasoline was much higher at T-
3 02 and T-03 than at T-04 and the other wells in the core plume -- which is consistent with Ds'
4 theory that the Texaco releases in the 1980's were predominantly diesel.

5
6 Dr. Bruya contended that there was no evidence of MTBE in LF-04 NAPL, basing his
7 finding on the testing done by Mr. Lenk -- which was of uncertain sensitivity at the levels
8 tested. He then concluded that since there was MTBE in the NAPL under the Texaco lot and
9 under the Qualcom lot that the NAPL at the Manifold was different from Texaco's NAPL.
10 Dr. Bruya's assumptions that the Lenk testing was accurate and that the testing conclusively
11 proved that there was no source of NAPL containing MTBE at the Manifold were not well
12 founded. There was no evidence of how the sample that Mr. Lenk tested was obtained, and
13 as previously indicated, there clearly was NAPL containing MTBE at the Manifold, e.g.
14 MTBE from Powerine. Moreover, it came to light on cross examination that Dr. Bruya was
15 for some reason unaware of a January 1993 report from a Phoenix laboratory showing
16 MTBE in a groundwater sample taken from R-01, and as previously indicated, the
17 contamination at R-01, in the Arbitrator's opinion, could only have come from the Manifold.
18 Dr. Bruya then suggested that the MTBE at R-01 might have come from a leak in the water
19 draw line on the Shell property and gravitated as dissolved phase through the Manifold and
20 down to the Qualcom lot. However his partitioning theory was based on incorrect
21 assumptions about how the NAPL and groundwater samples would have been collected. It is
22 clear to the Arbitrator that Dr. Bruya was grasping at straws in an attempt to explain the
23 finding at R-01 -- and in the process point the finger at Shell.

24
25 Further, Dr. Uhler offered considerable evidence which, in the Arbitrator's opinion,
26 conclusively established that the LNAPL at T-02, T-03 and T-11 and T-12 was different
27 from the LNAPL within the core plume, e.g. the weathering analysis, the gas
28 chromatographic readings, the PIANO analysis, etc.

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3 **ADDITIONAL EVIDENCE PRODUCED BY D**
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5 In addition to the evidence already referred to, Ds produced considerable additional evidence
6 supporting their view of the case. For example, the Hydrocarbon Distribution Map showed
7 the core plume crossing the Texaco property between T-03 and T-04. This is of course
8 consistent with the fingerprint evidence produced by Ds. Further, high soil gas readings were
9 recorded in 1992 in the area of the SFPP tanks. This is consistent with SFPP's tanks being a
10 source of the NAPL in the core plume.
11

12 Further, all of the hydropunch data supported Ds' contention that there was not a gap in the
13 core plume.
14

15 Further, the Fugro direct soil borings taken in 2001 and analyzed by Delmar Analytical
16 showed no gap in the core plume and no release within the canyon.
17

18 Further, Sam Williams testified to different analysis's he had done. The Arbitrator found him
19 to be straight forward and credible. He testified that pre-1992 Shell NAPL did not migrate
20 beyond the Shell property and post 1992 Shell NAPL (from the alleged break in the water
21 draw line) did not progress beyond S-01; that the concentrations in the Shell monitoring
22 wells are relatively static; that NAPL from the T-09 spill had not migrated beyond the
23 Texaco property and that the MTBE found in T-11 resulted from the T-09 spill.
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1 Mr. Williams also testified that the LIF readings were consistent with the soil gas readings,
2 i.e. they showed the NAPL following the same path.²⁹ Dirk Cockrum testified that these
3 findings were a foregone conclusion, or put another way, that Mr. Williams was going to use
4 the Fugro data to support the conclusion that his employers' wanted. The Arbitrator does not
5 agree. Mr. Cockrum's would do well to view P's expert witnesses with the same degree of
6 skepticism.

7
8 Further, Dr. Shahrokh Rouhani's statistical analysis confirmed the fact that Dr. Hromadka had
9 "cherry picked" his data and that using all the available data, there was no basis for Dr.
10 Hromadka's Site Conceptual Model. Further, using all the available data, Dr. Rouhani
11 provided corroboration that there was no gap in the core plume; that the path of the core
12 plume was as previously described and that Texaco was not the source of contamination in the
13 core plume.

14
15 Finally, Ds' counsel complained that because of P's constantly changing theories, he was
16 forced to "shoot at a moving target." The downside of this is that one has to be quick with his
17 gun (which Ds' counsel was). The upside is that when you've destroyed the target, there's
18 nothing left to shoot at. In other words, at the conclusion of the hearing, P simply had no
19 theory that would support its view of the case.

20 21 ANSWERS TO QUESTIONS

22
23 Based on the foregoing, the Arbitrator answers the four questions that he posed above and
24 finds as follows:

25
26
27
28 ²⁹ The Arbitrator found Mr. Williams far more knowledgeable about LIF readings and mapping than
P's expert, Dr. Shaller. Interestingly, when Dr. Shaller was pinned down, his mapping wasn't all that
different than Mr. Williams'.

1 **Answer to Question #1.** There is a continuous plume running from the Manifold through the
2 canyon and the west side of the Texaco property and then under the Qualcomm parking lot.
3 There has never been a "gap."

4
5 **Answer to Question #2.** Shell product, either as NAPL, free or dissolved, has not migrated
6 from the Shell property to the Manifold and has **not** contributed to the core plume.

7 **Answer to Question #3.** Texaco has **not** contributed to the core plume.

8
9 **Answer to Question #4.** The Texaco plume has **not** merged with the core plume.

10
11 **DISCUSSION OF THE APPLICABLE LAW**

12
13 **Burden of proof.** It is not necessary to discuss the parties' respective burdens of proof
14 because the Arbitrator would make the same findings and rulings irrespective of which party
15 had the burden of proof, i.e., assuming arguendo that Ds have the burden of proof on any
16 issue, Ds have satisfied that burden.

17
18 **Indemnity.** P seeks indemnity against Shell and Texaco based on indemnity clauses in their
19 leases and in Texaco's Indenture and on principles of equitable indemnity. The Arbitrator
20 finds that whether the Leases and Indemnity clause are construed as specific or general
21 indemnity provisions they are inapplicable to this case and principles of equity do not warrant
22 indemnity.

23
24 The Arbitrator has found that Shell free product has not migrated beyond the Shell property
25 and that Shell has accepted responsibility for remediating whatever remains.³⁰ The Arbitrator
26 has also found that the core plume and the Texaco plume are completely separate from each
27

28

³⁰ Mr. Williams testified that a small amount of MTBE might have migrated as far as the Mobil property. Shell will be responsible for cleaning that up, infra.

1 other and have not merged.³¹ The two plumes are separated geographically, the dividing line
2 being between T-03 and T-04. They are also separated chronologically. As evidence by the
3 1995 natural attenuation letter, any contamination caused by Texaco on its property prior to
4 that time was remediated by Texaco. The core plume apparently resulted from spills at the
5 Manifold in the late 1980's with MTBE having continued to move further and further into
6 the Qualcomm lot. The Texaco MTBE plume in the Qualcomm lot resulted from the T-09 spill
7 in 1999. Texaco has prevented free product from that spill from migrating beyond its
8 property has accepted responsibility for any further remediation of that free product and for
9 remediation of the MTBE within the Texaco plume, *infra*.

10
11 Under the above circumstances, it would defy logic and fairness to find Texaco responsible
12 for cleaning up all of the contamination. Further, to the extent that the "sole cause" language
13 in the indemnity clauses is a basis for indemnification, it is clear that SFPP was the sole
14 cause of the core plume and Texaco was the sole cause of the Texaco plume. They are
15 unrelated.

16
17 Further, the principal cases relied on by P are inapplicable to these facts. Ralph M. Parsons
18 Company v. Combustion Equipment Assoc., Inc. (1985) 172 Cal.App.3d 211 and John E.
19 Branagh & Sons v. Witcosky (1966) 242 Cal.App.2d 835 are personal injury cases involving
20 concurrent causation. They involve a single act at a single moment in time causing damages
21
22
23

24 ³¹ Assuming *arguendo* that the specific indemnity clauses were applicable to an environmental case
25 such as this, the Arbitrator would not order indemnification if a *de minimis* amount of MTBE had
26 found its way into the core plume at some location in the Qualcomm lot. As the evidence has clearly
27 shown, there have always been and there currently are two separate plumes, the core plume and the
28 Texaco MTBE plume emanating from the T-09 release. Further, P's renewed pumping efforts may
have caused a small amount of MTBE to migrate westward towards R-09 and R-10 and will
eventually cause the MTBE to migrate westward and be captured by P's groundwater remediation
system, *infra*. The fact that P's **own** pumping efforts may cause the MTBE plumes to eventually
merge does not cause the specific indemnity provisions to come into play. Further, if SFPP had
effectively carried out the Board's 1992 Order, the only plume in the Qualcomm lot in 1999 would have
been the Texaco plume -- for which Texaco has accepted responsibility.

1 at a single location. That is dramatically different than different acts at different times
2 causing damages at different locations.

3
4 **AWARD**
5

6 Based on the foregoing, the Arbitrator rules in favor of Ds on all causes of action and declares
7 the rights and obligation of the parties to be as follows:

8 1. Shell and Texaco have not breached any provision in their leases, and in the case of
9 Texaco, in its Indenture, and need not indemnify P and need not vacate their properties.
10

11 2. Shell and Texaco have to date, and at their own expense, fully complied with Health
12 Department and Board Orders related to cleanup of contamination for which Shell and Texaco
13 have accepted responsibility.
14

15 3. The most efficient way of remediating the contamination at the MVT and under the
16 Qualcom lot is to have one party, in this case KM, be responsible for all the remediation
17 efforts and for compliance with all Health Department and Board Orders related to the
18 remediation. Therefore, the Arbitrator orders KM to assume both the responsibility and the
19 risk related to all future remediation and cleanup work on or under the Shell and Texaco
20 properties and on or under all properties at the MVT subject to KM's control and on or under
21 the entire Qualcom lot and on or under any locations to which the existing contamination
22 may spread. If after the date of this Award, Shell and/or Texaco should experience a new
23 spill or a new release on either or both of their properties, then Shell and/or Texaco shall be
24 responsible for remediation of that spill or release.
25

26 4. KM is ordered to do the cleanup work as above set forth and to indemnify and hold
27 harmless Texaco and Shell for any liability arising out of its failure to do the cleanup work
28

1 and any failure to comply with past or future orders of the Health Department and Board
2 related to the cleanup work.

3
4 5. With respect to the Shell property, the future cleanup work appears minimal. It will be
5 necessary to continue to monitor the existing wells, and as a result of the break in the water
6 draw line, to do further remediation work at S-01 and to cleanup any MTBE that might
7 possibly have migrated beyond the Texaco property. Dr. Hutchison's estimate³² of \$300
8 thousand appears to be too high and there are questions of who was responsible for
9 maintenance of the water draw line and who caused the alleged break in the line. The
10 Arbitrator orders that Shell pay P \$150 thousand for assuming all of Shell's remediation
11 costs.

12
13 6. With respect to the Texaco property, Dr. Hutchison estimated the cost of remediating
14 the T-09 spill on the property to be \$500 thousand and estimated the cost of monitoring the
15 existing wells to be \$100 thousand. Dr. Hutchison's estimate again appears to be too high.
16 Assuming that the total remediation cost is \$26.16 million, the cost assigned to remediating
17 the T-09 spill is disproportionately high. The Arbitrator orders that Texaco pay P \$525
18 thousand for assuming Texaco's costs of remediating the T-09 spill on Texaco's property and
19 monitoring all of Texaco's wells.

20
21 With respect to Texaco's MTBE plume in the Qualcom lot, Mr. Williams testified that he did
22 not think that another well in the parking lot would be necessary and that KM's current
23 pumping system would gradually draw MTBE from the Texaco plume into KM's
24 groundwater remediation system. He testified that remediating the MTBE from the Texaco
25 plume would increase the cost of remediating the MTBE in the core plume by 2.2%, and on
26

27
28 ³² With respect to Dr. Hutchinson and Mr. Williams' estimates, the Arbitrator did not hear any
testimony rebutting those estimates, however, the Arbitrator did hear other testimony relating to
remediation costs.

1 that basis, he estimated Texaco's share of the total cost of remediating the MTBE in the
2 Qualcom lot to be \$6 to \$8 thousand per year for two to five years. Given that Mr. Williams's
3 estimate is a "best case scenario," the Arbitrator orders Texaco to pay P \$40 thousand for
4 assuming Texaco's cost of remediating the Texaco plume.

5 Texaco is therefore ordered to pay P a total of \$565 thousand for assuming all of Texaco's
6 remediation costs.

7
8 7. The Arbitrator must allocate remediation costs incurred by the parties subsequent to the
9 Cost Sharing Agreement.³³ In view of the Arbitrator's findings, KM is required to reimburse
10 Texaco for all expenditures by Texaco that are attributable to the cleanup of the core
11 plume.³⁴ At the conclusion of the hearing, the Arbitrator advised the parties that based on
12 what he had received from them he would not be able to determine what costs were
13 attributable to cleanup and therefore reimbursable and what costs were attributable to
14 litigation and therefore not reimbursable. Further, there are some costs that may well fall into
15 both categories. The parties suggested that the Arbitrator make a finding as to the parties'
16 obligation to reimburse the other and that they would then attempt to agree on an amount.
17 The Arbitrator has made such a finding and hereby orders the parties to meet and confer and
18 attempt to agree on the amount that is to be reimbursed and to then factor in the costs that
19 Texaco and Shell have been ordered to pay to P for assuming their cleanup costs. If they
20 cannot agree or can only agree in part, the Arbitrator will hold a further hearing on such
21 terms as the Arbitrator shall order.³⁵

22
23 Dated: March 21, 2003

24 _____
Robert T. Altman, Arbitrator

25
26
27 ³³ At the outset of the hearing the parties advised the Arbitrator that he was **not** expected to order
reimbursement of attorneys' fees or litigation costs.

28 ³⁴ The Arbitrator is assuming that KM did not incur any costs in connection with the Texaco plume.

³⁵ For the benefit of the parties, the Arbitrator has attached a copy of Dr. Jackson's report to the
Arbitrator.

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2 C:\Documents and Settings\mgreenberg\My Documents\SFPP v. Equilon\Final Documents\ALTMAN'S AWARD.doc

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On the Source of Gasoline Contamination in Mission Valley

Opinion by Richard E. Jackson, P.E., Ph.D.

Technical Expert to Judge Robert Altman

SFPP vs. Equilon

March 20, 2003

Summary

I conclude that the Plaintiffs argument - that the gasoline contamination beneath the Qualcomm stadium parking lot (QSP) is caused by spills at the Texaco/Equilon facility - is unproven and incorrect. The Defense has made a more compelling argument based upon a better conceptual site model to explain this contamination. While it is of course the burden of proof of the Plaintiff to establish the origin of the gasoline contamination and thus an explanation of this conclusion is strictly unnecessary, the circumstances surrounding this contamination are so unusual that an explanation is warranted.

The Plaintiff's Conceptual Site Model

The principle of Occam's razor - that the fewest possible assumptions are to be made in explaining a phenomenon - argues for the Plaintiffs claim that the gasoline contamination beneath QSP is derived from the nearby Texaco facility rather than the distant manifold of SFPP. Not only did Mr. Beckett, a respected contaminant hydrogeologist, conclude in 1999 that "[t]he most logical source for gasoline impacts in QSP is the closest MTBE-gasoline source and the one that has a correspondingly strong groundwater signature"¹ but also the distance of travel of the gasoline that the Defense

¹ Beckett, G.D., June 3, 1999. Letter report to Don Hoirup of the San Diego Region Water Quality Control Board, "Overview of Fuel Plume conditions at the Equilon-Texaco Terminal, 9966 San Diego Mission Road, and the Mission Valley Terminal, San Diego. California", Aqui-Ver, Inc., Exhibit 286. In his summary argument, Plaintiff's counsel presented this statement by Beckett in his concluding slide. It should

(continue)

proposes is of extraordinary length, i.e., a distance from the SFPP manifold to QSP of 1500 feet. Furthermore, the Plaintiffs presented a plausible source of the gasoline in the form of the vapor recovery tank on the Texaco facility. Finally, the Plaintiffs presented a conceptual site model ("model") that indicated there were in fact two gasoline LNAPL zones separated by a gap: the first located around and down-gradient² from the SFPP manifold, the second stretching from well R-01 down-gradient to QSP. The presence of the gap between the two gasoline zones was consistent with Beckett's first principle of fuel spills, namely, that "[i]t is the exception, rather than the rule, to find product significant distances from the release point"³.

Therefore, the Plaintiff's model assumed not only a short distance of gasoline migration from the vapor recovery tank to the R-09 and R-10 area beneath the QSP (i.e., < 500 ft), but also assumed that the fuel hydrocarbons in the vapor recovery tank were the cause of the contamination in wells R-01, T-18 and beneath the QSP. This latter point was strongly urged by the Plaintiffs' counsel using chemical analyses by Dr. Bruja conducted in 1991 for Texaco, which showed strong similarity between the LNAPL in the vapor recovery tank and in well T-18.⁴ However, this model proved impossible for the Plaintiffs to sustain for at least four reasons. Firstly, their forensic evidence proved inadequate, secondly, there was no evidence of infiltration of fuel into the soil near the tank, thirdly, the Plaintiffs' concept of the aquifer system beneath Mission Valley⁵ did not account for the measured hydraulic properties and sedimentary architecture, and, fourthly, the Plaintiffs misinterpreted what the measured LNAPL thicknesses within the various wells actually meant.

(continued)

be noted that later in the same report from which this quotation is taken, Beckett states that in his opinion the Texaco "site appears to have no regional impacts and is not a probable contributor to the QSP gasoline plume." Beckett was referring to leaks in the "10-inch MVT feed lines coming in from Miramar and leaving to the Harbor after passing through the K-M MVT manifold."

² The gradient referred to is that of the water table. i.e., the hydraulic gradient along which the gasoline will migrate as free-phase LNAPL, light non-aqueous phase liquid, or "free product". LNAPL trapped by soil capillary forces is referred to as residual LNAPL.

³ Beckett, June 1999, p. 2.

⁴ Friedman & Bruya, Inc., December 26, 1991, letter report, Exhibit 137(?).

⁵ Integral Consultants, "site conceptual model" (exhibit 352), submitted to RWQCB, November 7', 2001.

Furthermore, all other potential Texaco sources seemed even less likely because of the strong evidence presented over the course of the trial of southerly ground-water flow from the Texaco loading rack that would not cause southwest-ward migration of LNAPL towards R-09 and R-10 in the QSP. To understand the weakness of the Plaintiff's model, it is helpful to understand the evidence associated with these four points.

[a] Forensic Analysis

Dr. Bruya argued two main points:

1. The LNAPL samples analyzed by his company in the early 1990s and in 1999 all point to the conclusion that the Texaco facility was the source of the gasoline beneath the QSP.
2. The source of the MTBE in ground water appears to be contact water, i.e., water associated with that withdrawn from gasoline storage tanks.

The Defense showed that the Dr. Bruya had developed his conclusions without knowing that organic lead was present in not only the fuel samples collected at Texaco and at the QSP, but also in a sample collected in 1999 from LF-04. This revealed similarity of LF-04 LNAPL with LNAPL samples collected down-gradient at R-09, R-10 and T- 18 pointed to a single source from the upper part of the Mission Valley Terminal (MVT). This conclusion was supported during cross-examination by evidence provided by Dr. Uhler of Battelle that was based upon toluene concentrations within the LNAPL, the phytane versus pristane ratios, and the deuterium and carbon-13 isotope compositions that all indicated a long gasoline plume that developed near LF-04 and a quite separate NAPL plume migrating south-wards from the Texaco loading rack. Dr. Uhler later showed during his own testimony that the diesel component of the gasoline from the "core" plume (i.e., that moving from the manifold area to the QSP) had very different

characteristics⁶ than that of the Texaco plume sampled at T-2 and T-3 on the southern boundary of the Texaco facility.

Concerning the source of the MTBE in the ground waters throughout Mission Valley and beyond the QSP, Dr. Bruya expressed the opinion that partitioning theory⁷ led to the conclusion that it was contact-water, perhaps from the Shell facility at the north end of the Terminal. However, the data that Dr. Bruya presented suggested that the MTBE could readily be explained by dissolution from the adjacent LNAPL trapped near the manifold rather than being contact-water from the Shell facility. Dr. Bruya was clearly unaware of the considerable errors introduced into his calculations by the small size of the NAPL sample compared with the very large volume of aquifer from which the ground-water sample was collected. This is due to the long well screens that are typically installed at the MVT, only a fraction of which are in contact with aquifer materials contaminated with LNAPL ("the smear zone"). In addition, the recovery of NAPL in contaminated cohesionless soils is a difficult task and also, if field preservation of the samples is not conducted, further losses will likely occur by volatilization of the MTBE prior to laboratory analysis. Thus, no real importance should be attached to the difference between the range of MTBE concentrations estimated from soil samples to be present in ground water at T-04 (2,700 to 21,000 µg/L) with the "MTBE level nearest the time of NAPL sampling" (21,000). The fact that Dr. Bruya would see such a difference as meaningful is a warning to those experts who offer opinions beyond their competence.

[b] The Vapor Recovery Tank

Given the southerly ground-water flow pattern beneath the Texaco facility, the concept of the vapor recovery tank as source for the QSP gasoline plume had the merit of proximity and of being directly up-gradient of the QSP LNAPL zone. Dr. Hromadka apparently seized upon the potential importance of the vapor recovery tank after it was recently suggested to him by Plaintiffs' counsel when all other sources on the Texaco

⁶ The plots of the dibenzothiophenes and phenanthrenes (D2/P2 vs. D3/P3) and of the C-18/phytane and C-I7/pristane on their own merits strongly indicated that two LNAPL plumes were present on site.

⁷ Rixey, William G. and Sushrut Joshi, 2000, Dissolution of MTBE from a Residually Trapped Gasoline Source, American Petroleum Institute, No. 13.

facility had failed to provide an unambiguous rationale by which Texaco would be responsible the QSP gasoline plume.⁸ As I understand it, Dr. Hromadka's theory was based upon fuel leakage from the vapor recovery tank that would migrate westwards towards R-01, T-21 and T-18 due to the perched water-table he discovered at VW-1 and in heterogeneous soils with a horizontal to vertical anisotropy of 5:1 or 10:1.

This theory became untenable when the Defense showed that the water-level data for VW-1 was erroneous and that no extensive perched water table existed.⁹ Furthermore, it became quite clear later in the trial that no leak from the vapor recovery tank had been detected by the CPT-LIF data points (F60 and F61) that had been collected in the close vicinity of the tank itself and well T-20. In hindsight, the weaknesses of this theory should have been apparent to Dr. Hromadka and Mr. Cockrum.

[c] The Aquifer System

The Plaintiffs' view of the Mission Valley aquifer system was set forth in their site conceptual model¹⁰ and in testimony by Dr. Hromadka and Mr. Cockrum. This model exhibited two singular features:

1. The ground-water flow pattern between the SFPP manifold and the QSP was of such constant geometry that the stream-tubes estimated from these maps could give definitive indications of particular up-gradient sources for particular downgradient contaminant "hits" at monitoring wells.
2. A gap exists between the two LNAPL zones at the SFPP manifold and the QSP.

Firstly, the stream-tubes connecting presumed sources with down-gradient wells, the sketching of which consumed much time during the trial, were described by the piezometric surface contour maps based upon water levels at only twelve wells along the

⁸ The witness admitted under cross examination that the Plaintiffs' site conceptual model (exhibit 352) omitted any mention of the vapor recovery tank as a source of the QSP gasoline plume. Dr. Hromadka did mention this possibility in his deposition, p. 115, taken December 23rd, 2002.

⁹ I pointed out following the cross examination of Dr. Huntley, that there was evidence of perching of ground water in the photographs of the excavation of Texaco's 4,000 gallon tank (Exhibit 385), however Dr. Huntley responded, correctly in my view, that there was no evidence of an extensive perched water table across the Texaco facility that would provide a transport mechanism to move fuel to well R-01.

¹⁰ Integral Consultants report (Exhibit 352).

1500-foot length of the Valley. These stream-tubes merely provide gross approximations of the actual paths taken by contaminant molecules that are subject to both advective displacement and dispersion caused by textural variability in the aquifer sediments. For example, the fine-grained sediments around SFPP-7 are not reflected in the piezometric surfaces used by Dr. Hromadka but such sediments would cause ground-water contamination and LNAPL to follow the path of least resistance through by-passing.¹¹ Furthermore, among the simplifications used by all parties was the treating of the Valley walls as no-flow boundaries when in fact they must be seepage faces resulting from higher hydraulic heads in the highland areas adjacent to the Valley that would mean arcuate contours leading to the deflection of the stream-tubes into the axis of the Valley. Finally, spills of LNAPL may spread laterally in heterogeneous soils, as Dr. Hromadka pointed out, therefore the penetration of the LNAPL into the water table might occur a considerable lateral distance from the leak location. To summarize, it is not possible, with piezometric contours of the scale used, to relate up-gradient sources to downgradient wells in such a poorly-defined aquifer system in which preferential flow paths undoubtedly exist.¹²

Secondly, the concept of a gap between LNAPL zones was advanced by Dr. Hromadka and Mr. Cockrum. It appears to have depended upon a simplistic analysis of the CPT textural data in Dr. Shaller's geologic cross section along the northeast-southwest axis of Mission Valley that showed the presence of fine-grained sediments between SFPP-7 and R-02. The site conceptual model of Integral Consultants¹³ stated that "the valley-fill deposits are composed of randomly-distributed coarse-grained and

¹¹ This point is readily seen in the LIF cross section for SFPP-7/R-02 drawn by Dr. Huntley (Fig 4-5b) in which the LNAPL has moved to the eastern side of the Valley where continuous sands exist and has thus avoided being trapped by the fine sediments along the western side of the Valley.

¹² Two recent papers demonstrate the detailed hydrogeological mapping necessary to define "preferential flowpaths" controlling contamination in heterogeneous alluvium: [a] Amerson, I. and R.L. Johnson, 2003, Natural gradient tracer test to evaluate natural attenuation of MTBE under anaerobic conditions. *Ground Water Monitoring & Remediation* 23, no. 1, pp. 54-61. [b] Zheng, C. and S.M. Gorelick, 2003. Analysis of solute transport in flow fields influenced by preferential flowpaths at the decimeter scale. *Ground Water* 41, no. 2, pp. 142-155.

¹³ Integral Consultants, Exhibit 352, p. 9.

fine-grained deposits” and that “[t]he cross sections do not indicate lateral connectedness.” This perceived lack of connectedness between high-permeability sections of the aquifer system was shown to be demonstrably false in the LIF cross sections that were displayed by Dr. Huntley and Mr. Williams for the Defense. Furthermore, it has become accepted that in aquifer systems where the sand fraction is >20%, such as is the case in the Mission Valley aquifer, interconnectedness is the rule not the exception.¹⁴ The Plaintiffs’ claim of lack of interconnectedness allowed them to dismiss the high hydraulic conductivity measurements from the M-4, RW-5 and T-3 pumping tests (K~150 ft/day) and thereby produce much lower rates of dissolved-contaminant migration, e.g., MTBE travel rates of < 400 ft/yr, when rates of 1000 to 2000 ft/yr are justifiable.

[d] LNAPL thicknesses

Dr. Hromadka testified that one reason that showed that the Texaco facility was the source of contamination in well R-01 was that R-01 always had much lower free-product thicknesses R-09 and R-10 in the QSP. Mr. Kilkenny also said that he did not believe that soil texture would control the LNAPL thickness in wells. By contrast, Dr. Huntley opined that differences in thicknesses between wells are due to the soil texture adjacent to the well screen and to the position and history of the local water table. In stating these facts, Dr. Huntley was simply stating well established theory that should have been understood by all experts concerned in this trial.¹⁵

In conclusion, the Plaintiffs’ conceptual site model was undermined by weaknesses that should have been evident to an independent expert, however neither Mr. Cochrum, Dr. Hromadka, Dr. Bruya nor Mr. Kilkenny fitted this description.

¹⁴ Fogg, G.E., 1986. Groundwater flow and sand body interconnectedness in a thick, multiple-aquifer system. *Water Resources Research* 22, no. 5, pp. 679-694.

¹⁵ See [a] Farr, A.M.; R.J.Houghtalen; and D.B.McWhorter, 1990. Volume estimation of light nonaqueous phase liquids in porous media. *Ground Water* 28, no. 1, pp. 48-56. [b] Lenard, R.J. and J.C.Parker, 1990. Estimation of Free hydrocarbon volume from fluid levels in monitoring wells. *Ground Water* 28, no. 1, pp. 57-67.

The Defense's Conceptual Site Model

The Defense's model relies, as a well-engineered structure should, on careful analysis of data and material properties. The Defense argued that the source of the QSP gasoline plume was the SFPP manifold that had leaked during the period of 1987 to 1991, a period that was determined by the presence of MTBE in the QSP gasoline plume. The 1992 Corrective Action Plan filed with the Regional Water Quality Control Board on behalf of SFPP, Shell, Mobil and Powerine by Simon Hydro-Search¹⁶ identified an LNAPL plume from soil gas surveying and confirmatory ground-water quality sampling that followed a "buried stream channel" from the SFPP manifold to wells R-09 and R-10 in the QSP. This description of the LNAPL pathway was supported by Harding Lawson Associates in their 1999 report for Kinder Morgan and SFPP.¹⁷ Dr. Uhler showed that the LNAPL in the main plume from the SFPP manifold to the QSP was compositionally different from that spilled at Texaco. CPT-LIF and Hydropunch data confirmed the continuity of LNAPL and dissolved MTBE in ground water, respectively, from the manifold to the QSP.

Two issues concerning the reliability of the basis of the Defense's model merit careful consideration. The first is the reliability of the evidence for the alleged 1987-91 leaks. The fact that there was a leak of the Powerine pipeline at the SFPP manifold during 1987-91 is not questioned. But could this leak alone explain the gasoline in the QSP or are other leaks during the same time period also necessary at the SFPP manifold or elsewhere in the north Tank Farm to explain the observations and measured values? The second issue concerns the reliability of Dr. Huntley's computation of a LNAPL travel rate from the SFPP manifold of 1200 ft in less than 3 years. Is this rate of travel consistent with what we know of gasoline migration in granular aquifer materials?

¹⁶ Corrective Action Plan, Mission Valley Terminal, 9950 San Diego Mission Road, San Diego, California. September 1, 1992. Simon Hydro-Search Inc., Huntington Beach, California., p. 7. Exhibit 1066.

¹⁷ Groundwater Characterization Report, Mission Valley Terminal, San Diego, California. January 14, 1999. Harding Lawson Associates, Irvine, California, p. 5. Exhibit 1270. This statement by HLA echoed their earlier statements in the Draft Corrective Action Plan for Groundwater Remediation at the MVT, Exhibit 1438, p. 6.

[a] Was Powerine the Source of the Gasoline Leak?

Defense's Conceptual Site Model¹⁸ identified leakage from the Powerine pipeline as "the primary source of the LNAPL gasoline plume", but noted that the April 1991 soil gas survey suggested that tanks within the SFPP tank farm were also leaking.¹⁹ The MTBE concentration in the gasoline sampled at R-09 and R-10 in 1992 and analyzed by Mr. Lenk was (approximately) 2000 ppm (i.e., 0.2% by volume).²⁰ A Raoult's Law calculation indicates that ground water in contact with such an LNAPL would have an initial MTBE concentration of approximately 84,000 µg/L (ppb).²¹ When such contaminated ground water flowed down gradient, dispersion would occur and concentrations would decrease. A ground-water sample at R-01 collected in January 1993 contained 15,800 µg MTBE/L (i.e., ppb), a value consistent with a leak at the manifold of gasoline with 2000 ppm MTBE.²² Therefore, is such contamination attributable to leaks from the Powerine pipeline that Mr. Bennett claimed would be detected by his continual checking?

That Powerine gasoline contained significant quantities of MTBE on some occasions is not in question. Ground water that collected immediately down-gradient of the Powerine tanks displayed elevated levels of MTBE over the years.²³ Despite Mr. Bennett's claims to the contrary, it appears that his material balance calculations could not alert him to continuing losses that I suspect were attributable to subsurface perforations of his pipeline that lacked cathodic protection. Thus, as Mr. Bennett

¹⁸ Exhibit 1209, p. 7.

¹⁹ See Figure 11, TVH concentration in soil gas, central area. Site Characterization Report, by Simon Hydro-Search, 8/21/92, Exhibit 1301.

²⁰ Exhibit 193.

²¹ This assumes an aqueous solubility of 42,000 mg/L, the value used by Johnson et al., 2000. MTBE: to what extent will past releases contaminate community water supply wells? Environmental Science & Technology 34(9):210A-217A.

²² Exhibit 194.

²³ Defense presented historic analytical results showing MTBE concentrations as high as 2600 ppb in LF-06 and values of 0 (P-01) and 1 (R-07) ppb up-gradient of the Powerine tanks. The dates of the samples are unknown, except for data presented in the 1999 AQUI-Ver report (Exhibit 286, Figure 6) in which LF-06 contains 680 ppb in mid-1998.

admitted, it is conceivable that Powerine was losing a quantity of gasoline equal to the "line-fill volume" of 90 barrels or 3600 gallons each week when SFPP transmitted gasoline to the Powerine tanks.²⁴ Over the course of one year, this would amount to 180,000 gallons. As time wore on in the 1980s and MTBE concentrations were increased by refiners in Los Angeles County, it is most doubtful that Mr. Bennett would be able to detect increases in oxygenate concentrations from <0.05% ("clear") to around 2%²⁵ by his test method as he described it to the Court. In April 2001, a ground-water sample (FCL-7) collected at the SFPP manifold with a direct-push tool contained 200,000 ppb MTBE and another 240,000 ppb t-butyl alcohol, the oxidation product of MTBE. Such a concentration would be consistent with a gasoline containing 2% MTBE from which three quarters of the MTBE had dissolved out leaving it with 0.5% MTBE by volume.

Because modern gasolines contain 11 to 15% MTBE, their effective solubilities computed by Raoult's Law are much higher, e.g., 4,700,000 ppb for reformulated gasoline.²⁶ However, none of the LNAPL samples collected in July 2001 at the Mission Valley Terminal and analyzed by Zymax contained MTBE above 0.1%.²⁷ This finding, when considered together with the significant difference between the MTBE concentrations in the FCL-7 sample and these effective solubilities, lends support to the conclusion that the Powerine pipeline was the primary source of gasoline contamination in Mission Valley.

[b] How Rapidly Could Powerine Gasoline Migrate to the QSP?

The computation of the velocity of NAPL migration through granular aquifer materials, such as exist beneath the Mission Valley, is an unexplored topic in the field of

²⁴ This is because his meters were on his loading rack and not at the Powerine manifold.

²⁵ According to Fogg et al., Impacts of MTBE on California Groundwater, Exhibit 1369: "MTBE was used in California's lead phase out program in 1979 at volumes up to 2 percent as a lead substitute and octane booster. The US EPA approved use of MTBE in 1981 up to 10 percent and in 1988 approved its use up to 15 percent by volume."

²⁶ See Table 1, Johnson et al., *ibid.*

²⁷ The practical quantitation limit was reported as 1000 mg/kg or 0.1% by weight. Zymax lab nrs 24392-3 through 24392-9. Samples were analyzed from W-3(T-3?), W-4(T-4?), T-18, R-09, and R-10. Gasoline with 0.1% by wt MTBE yields an MTBE concentration in contact water of 42,000 ppb, approximately.

contaminant hydrogeology. Dr. Huntley attempted this for the Defense without the aid of a multi-phase simulator such as is used by petroleum engineers who deal with the flow of hydrocarbons and water on a daily basis. Thus, the validity of the simplifying assumptions required to follow the approach he took to the estimation of NAPL velocity are worthy of inquiry.

Dr. Huntley began by computing a ground-water velocity range for the Mission Valley aquifer of 730 to 2500 ft/yr based upon hydraulic testing of wells that yielded hydraulic conductivities of the order of 50 to 175 ft/day, i.e., fine sands grading up to coarse sands. He then computed the relative velocity of LNAPL to ground water through experimentally determined curves (S_L vs. P_c) relating the LNAPL saturation of Mission Valley aquifer sediments to capillary pressure to obtain an effective LNAPL conductivity analogous to the hydraulic conductivity. Assuming that the LNAPL gradient down the Mission Valley aquifer was similar to the slope of the water table, Dr. Huntley concluded that when NAPL occupied just 10% of the pore space in the aquifer (i.e., a NAPL saturation = 0.1), the ratio of NAPL velocity to ground-water velocity “is 0.5 to greater than 1.” The higher NAPL velocities are due to the lower viscosity of gasoline compared with water. Consequently, Dr. Huntley concluded that “it is not unreasonable for NAPL to move 1200 ft from [the] manifold area to T-18 in [a] period of less than 3 years”.

Having assumed leakage from the Powerline pipeline beginning in 1987, his conclusion was consistent with the discovery of dissolved benzene in LF-04 ground water in late 1987 and LNAPL in LF-04 and T-18 in December 1991.²⁸ But Dr. Huntley’s approach applies to a uniform thickness of LNAPL migrating in a steady-state flow field with uniform multi-phase flow properties. As he himself pointed out, his approach requires a unit slope in the relative permeability curve such that all flow of LNAPL occurs within the bounds of this region of the curve. Such strong assumptions are unlikely to be fully met in the field, therefore is Dr. Huntley’s approach a good first

²⁸ Friedman & Bruya Inc. (amended report of August 1992) described these two LNAPL samples as “virtually the same”.

approximation of the actual processes involved or an unreal exercise based upon too many simplifications?

The only practical way to resolve this question is by multi-phase simulation using a petroleum-engineering computer code that can simulate the flow of both water and LNAPL in granular aquifer sediments. This was accomplished by Dr. Dwarakanath and Mr. Ewing of INTERA working under my direction and using the UTCHEM simulator developed at the University of Texas at Austin.²⁹ This two-dimensional INTERA model of the Mission Valley aquifer is itself simplified by assuming that the granular sediments comprising the aquifer are homogeneous with a permeability of 70 darcies ($K=200$ ft/day), a horizontal to vertical anisotropy of 10:1, and a porosity of 0.28. The length of the aquifer model is 1400 ft and is divided into 70 uniform grid blocks. The model height is 38 ft and composed of 30 grid blocks and the model width is one foot. A water table gradient of 1% was established prior to “spilling” gasoline into the model at a rate of 34 gallons per day with a head of one half foot of LNAPL. The LNAPL has a density = 0.78 g/mL and a viscosity = 0.61 cp, i.e., the same as used by Dr. Huntley. Figure 1 shows the migration of the LNAPL during early time (30 days after leakage began), while Figure 2 shows the LNAPL plume having traveled 1200 ft - the distance from the manifold to T-18 - in 150 days. The cascade-like effect of the LNAPL plume shown in the two figures is due to the relatively small number of grid blocks used to simulate the event.

The INTERA model treats the aquifer as a single, high-permeability unit as if the LNAPL were following a preferential flow path in gravel, which is demonstrably present in the Mission Valley aquifer. It also explicitly considers the penetration of gravels that are uncontaminated by LNAPL although likely contaminated with dissolved hydrocarbons. The process of penetration will slow LNAPL should it try to enter low-permeability materials, hence the trapping of the gasoline in the fluvial sediments beneath the QSP, however this process has not been simulated in the INTERA model which only investigates the LNAPL migration from the SFPP manifold to well T-18. The conclusion derived from the INTERA model is that a continuous gasoline spill of 34 gallons per day

²⁹ Delshad, M., G.A.Pope and K.Sephrnoori, 1996. A compositional simulator for modeling surfactant enhanced aquifer remediation, I: Formulation. *Journal of Contaminant Hydrology* 23, pp. 303-327.

over a period of less than one year can reasonably be expected to migrate from the SFPP manifold to T-18 through preferential flow paths in coarse aquifer materials such as have been documented in the Mission Valley Aquifer.

The applied LNAPL head of one-half foot is small considering the potential height of the pin-hole leaks above the water table. Even one-half foot causes some LNAPL migration up-gradient as is shown in Figure 1, in which the LNAPL plume has formed and begun its migration. Higher heads will cause further up-gradient LNAPL migration, thus explaining the high soil-vapor concentrations measured north of the manifold in 1991.³⁰ Higher heads will also cause more rapid down-gradient migration of the LNAPL. But higher heads from the weekly gasoline transmission (2-4 hours long) to Powerine's tanks would be followed by lower heads after transmission losses cease. Therefore choosing a low LNAPL head value is appropriately conservative.

Thus, Dr. Huntley's conclusion of gasoline migration from the SFPP manifold to T-18 within a period of three years is verified as a first approximation of gasoline migration in granular aquifer materials to the extent that the INTERA model itself represents the reality of the preferential flow paths within the Mission Valley aquifer and of the Powerine pipeline leaks. From reviewing the information provided for the trial, I am confident that these constraints are satisfied and that the INTERA model correctly predicts LNAPL migration within the Mission Valley aquifer arising from leaks involving as little as twenty thousand gallons of gasoline,³¹ although I suspect that the total volume leaked between 1987 and 1992 was much larger. Therefore, the Defendant's Conceptual Site Model - Exhibit 1209 - is accepted as being a reliable portrayal of the contamination events within the Mission Valley aquifer since 1987.

³⁰ See Figure 11, TVH concentration in soil gas, central area. Site Characterization Report, by Simon Hydro-Search, 8/21/92, Exhibit 1301.

³¹ The model width is only one foot, which represents the width of the preferential flow path that is the subject of the simulation. It is probable that much lateral spreading occurs around the leak point and therefore in reality a larger spill would be required. Thus, the volume of leaked LNAPL that is necessary to propagate the plume from the manifold to T-18 and beyond is greater than 34 gallons x 150 days or 5,100 gallons simulated. A leaked volume of four times this amount or 20,000 gallons is reasonable because the high perm preferential flow path will offer the least resistance to penetration by the LNAPL and it will permit LNAPL migration down-gradient.

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C:\Documents and Settings\mgreenberg\My Documents\SFPP v. Equilon\Final Documents\JACKSON.doc

**Testimony by Shell Oil Company Relative to
Tentative Addendum No. 5 To Cleanup and Abatement Order No. 92-01
Presented at the March 9, 2005 California Regional Water Quality Control Board
(San Diego Region) Regional Board Meeting in San Diego, CA**

Exhibit B



California Regional Water Quality Control Board

San Diego Region

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb9>
9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
Phone (858) 467-2952 • FAX (858) 571-6972



Gray Davis
Governor

July 24, 2003

Mr. Curt Stanley
Hydrogeology Advisor
Shell Global Solutions
3333 Highway 6 South
Houston, Texas 77082-3101

In reply refer to:
TSMC:40-0054.05:chanj

Dear Mr. Stanley:

**SUBJECT: SITE CONCEPTUAL MODEL FOR MISSION VALLEY TERMINAL
CLEANUP**

Thank you for your email dated June 4, 2003, requesting the Regional Water Quality Control Board, San Diego Region (Regional Board) acknowledge the Shell/Texaco site conceptual model for the Mission Valley Terminal as representative of the facts of the cleanup case. The Shell/Texaco model and the model submitted by Kinder-Morgan Energy Partners differ significantly regarding the release scenario and plume configuration. The Shell/Texaco site conceptual model is consistent with the data regarding these two issues. The data show a continuous plume of free product on the water table and/or residual free product in soil extending from the manifold area to the northern portion of the Qualcomm Stadium parking lot. This continuous plume is delineated by the soil gas survey, and the cone penetrometer-laser induced fluorescence survey. Monitoring well data also are consistent with this interpretation. The source of free product may never be known with certainty, but appears to have been in the area of the manifold and likely was a gasoline line owned by Powerine. Holes were discovered in this line following hydrostatic testing in 1992.

The Shell/Texaco lines under Friars Road do not appear to be a source of the free product, as these lines tested tight in a recent Tracer Tight test, and in previous line tests. Further, soil and water samples from the area where the lines emerge from under Friars Road do not indicate that free product is leaking from these lines.

A relatively small and distinct free product plume emanates from the Shell/Texaco portion of the terminal. This plume can be differentiated from the main free product plume emanating from the manifold area based on the relative proportions of diesel and lead in the two plumes.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at <http://www.swrcb.ca.gov>.

Recycled Paper

Mr. Curt Stanley

- 2 -

July 24, 2003

number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions please contact me at (858) 627-3926 or by email at chanj@rb9.swrcb.ca.gov.

Sincerely,

Julie Chan
Senior Engineering Geologist

JAC:jac:jac

cc: Mr. Gene Freed

Equiva Services LLC (Shell & Texaco)
6451 Rosedale Hwy.
Bakersfield, Ca 93308

Mr. Mark Greenberg
Baker & Hostetler LLP
333 S. Grand Ave., Suite 1800
Los Angeles, Ca 90071-1523

Mr. Dirk Cockrum
Kinder-Morgan Energy Partners, LP O/P SFPP, LP
370 Van Gordon Street
Lakewood, Co 80228-8304

California Environmental Protection Agency

**Testimony by Shell Oil Company Relative to
Tentative Addendum No. 5 To Cleanup and Abatement Order No. 92-01
Presented at the March 9, 2005 California Regional Water Quality Control Board
(San Diego Region) Regional Board Meeting in San Diego, CA**

Exhibit C

1 LOS ANGELES, CALIFORNIA; FRIDAY, JULY 11, 2003

2 8:45 A.M.

3 DEPARTMENT NO. 57 HON. RALPH W. DAU, JUDGE

4 CASE NUMBER: BS 083707

5 CASE NAME: SFPP VS. TEXACO

6 APPEARANCES: (AS HERETOFORE NOTED.)

7 REPORTER: OLGA NAVARRO, CSR #2805

8
9 * * * * *

10
11 THE COURT: NUMBER 14, SFPP.

12 MR. GREENBERG: MARK GREENBERG APPEARING ON
13 BEHALF OF THE DEFENDANT TEXACO OIL COMPANY.

14 MR. JOHNSON: MARK JOHNSON FOR PLAINTIFF
15 SFPP.

16 THE COURT: THIS IS HERE ON THE MOTION TO
17 CONFIRM THE ARBITRATION AWARD.

18 MR. JOHNSON: YES, YOUR HONOR. I HAVE HAD A
19 CHANCE TO REVIEW YOUR TENTATIVE AND IT'S CLEAR THAT
20 THE COURT HAS GIVEN THOROUGH CONSIDERATION ON THE
21 PLEADINGS HERE AND I THINK TO THE CASE IN GREAT
22 DETAIL.

23 I JUST WANTED TO MAKE A COUPLE OF POINTS
24 ACTUALLY, SO I WILL BE VERY BRIEF. THE INTERA,
25 I-N-T-E-R-A, MODEL CLEARLY ADDRESSES THE MIGRATION
26 OF CONTAMINATION AT ISSUE HERE. THE INTERA MODEL,
27 AS DR. JACKSON SAW IN HIS VIEW, COULD DETERMINE
28 WHETHER OR NOT THE CONTAMINATION COULD HAVE

1 MIGRATED THROUGH THE TESTIMONY OF DR. HUNTLEY.

2 THE COURT: THROUGH THE WHAT?

3 MR. JOHNSON: THROUGH THE TESTIMONY OF
4 DR. HUNTLEY. DR. HUNTLEY'S TESTIMONY CONCERNED
5 WHETHER OR NOT CONTAMINATION COULD HAVE MIGRATED
6 FROM THE MANIFOLD AREA TO THE PARKING LOT IN THE
7 TIME REQUIRED. IT'S CLEAR THAT THEIR MODEL WAS
8 MEANT TO ADDRESS WHETHER OR NOT THAT COULD HAPPEN.

9 IN TERMS OF THE ARBITRATOR'S RELIANCE ON
10 THAT MODEL --

11 THE COURT: BUT HE ACCEPTED THE TESTIMONY OF
12 THE WITNESS.

13 MR. JOHNSON: I AM SORRY?

14 THE COURT: HE ACCEPTED THE TESTIMONY OF THE
15 WITNESS.

16 MR. JOHNSON: YOU MEAN THE ARBITRATOR OR
17 TECHNICAL INVESTIGATOR?

18 THE COURT: THE ARBITRATOR.

19 MR. JOHNSON: WELL, THAT GOES TO MY NEXT
20 POINT, YOUR HONOR. THE AWARD SAYS THAT THE
21 ARBITRATOR WAS VIRTUALLY IN CONSTANT DISCUSSION
22 WITH THE TECHNICAL ADVISOR AND THE TECHNICAL
23 ADVISOR IN HIS REPORT IS TO DO THIS INTERA MODEL.

24 GIVEN THE IMPORTANCE THAT THE TECHNICAL
25 ADVISOR PLACED ON THE MODEL AND GIVEN THE AMOUNT
26 THAT WAS DONE, IT'S A CERTAINTY THAT THEY HAD TO
27 DISCUSS THE MODEL WITH JUDGE ALTMAN AND CLEARLY
28 JUDGE ALTMAN WAS USING THE TESTIMONY OF THE

1 TECHNICAL ADVISOR.

2 THE COURT: BUT HE BOUGHT THE TESTIMONY OF
3 THE WITNESS, YOU SAY.

4 MR. JOHNSON: HE BOUGHT THE TESTIMONY OF THE
5 WITNESS, BUT MY POINT IS THAT IF HE BOUGHT THE
6 TESTIMONY OF THE WITNESS, WE DON'T KNOW IF HE
7 BOUGHT THE TESTIMONY OF THE WITNESS WITH RELIANCE
8 ON THE FACT THAT FROM JACKSON HAD SAID THAT HE HAD
9 DONE THIS MODEL AND CONFIRMED IT.

10 MR. GREENBERG: IT IS VERY CLEAR IN THIS CASE
11 THAT HE RELIED UPON DR. HUNTLEY'S TESTIMONY AND NOT
12 DR. HROMADKA BECAUSE IF YOU READ THAT AWARD, HE
13 DIDN'T BELIEVE ANYTHING THAT DR. HROMADKA SAID.

14 THE COURT: HE SURE DIDN'T.

15 MR. GREENBERG: IT IS CLEAR WHO HE BELIEVED
16 AND WHO HE THOUGHT WAS LYING TO HIM.

17 THE COURT: RIGHT.

18 MR. GREENBERG: I WOULD BE REMISS IF I DIDN'T
19 TELL YOU THAT.

20 THE COURT: "IT IS A MOST ASTONISHING
21 STATEMENT OF UNRELIABILITY OF EXPERT TESTIMONY I
22 THINK I HAVE EVER SEEN."

23 MR. GREENBERG: YES, IT IS, AND IT'S VERY
24 CLEAR THAT THEY LOST EVERY SINGLE FACTUAL AND LEGAL
25 ARGUMENT IN THIS CASE, AND THAT THIS ONE, THIS
26 ISSUE OF NAPL MOBILITY AND SPEED --

27 THE COURT: N-A-P-L.

28 MR. GREENBERG: -- WAS NOT A SIGNIFICANT

1 FACT, AND IN FACT, THE REAL SIGNIFICANCE HERE IS
2 THE LASER INDUCED FLUORESCENT STUDY THAT WAS
3 UNCONTROVERTED, FOOTNOTE 29, JUDGE ALTMAN SAID EVEN
4 THEIR OWN EXPERT THAT THEY CALLED IN REBUTTAL, FROM
5 THE MANIFOLD ALL THE WAY DOWN. HOW FAST IT MOVED,
6 IT REALLY DOESN'T MATTER, IT'S THERE.

7 THE OTHER POINT IS AS NOTED IN THE
8 AWARD, THEIR OWN TESTIMONY, IS IT MOVED 400 FEET A
9 YEAR OVER THREE YEARS AND IT NEEDS TO MOVE 1,200
10 FEET. 400 TIMES THREE IS 1,200. THE POINT THAT I
11 NEED TO MAKE, YOUR HONOR, I WOULD LIKE THIS COURT
12 TO ADOPT ITS FACTUAL AND EVIDENTIARY FINDINGS IN
13 THE TENTATIVE, BUT I EXPECT THIS WILL BE APPEALED
14 AND I WOULD LIKE THE COURT TO ALSO MAKE A FINDING
15 ON THE ISSUE OF THE -- WHAT IS THE DUELING
16 DECLARATIONS AND WHETHER OR NOT THIS WORK WAS
17 EXPRESSLY APPROVED.

18 WE HAVE A SUBMISSION, AS WE NOTED IN OUR
19 BRIEF, WE HAVE A LETTER FROM JUDGE ALTMAN THAT BOTH
20 PARTIES HAVE RECEIVED AND I WOULD LIKE THE COURT
21 TO MAKE THE FINDINGS THAT IT HAS MADE AND THEN GO
22 TO THIS ISSUE OF WHETHER OR NOT --

23 THE COURT: THESE LOOK LIKE DIAMETRICALLY
24 OPPOSED DECLARATIONS.

25 MR. GREENBERG: WE WILL TAKE TESTIMONY IF YOU
26 WANT TO DO THAT.

27 THE COURT: I AM NOT SURE I WILL MAKE A
28 FINDING, BUT I AM NOT GOING TO DO IT ON THE BASIS

1 OF THE DECLARATIONS BECAUSE THEY CONTRADICT EACH
2 OTHER.

3 MR. GREENBERG: OF JUDGE ALTMAN.

4 THE COURT: NO, THE DECLARATIONS THAT HAVE
5 BEEN FILED.

6 MR. GREENBERG: I HAVE A DECLARATION OF JUDGE
7 ALTMAN, IF THE COURT IS WILLING TO STAND BY THAT.

8 THE COURT: I DON'T RECALL THAT.

9 MR. GREENBERG: YOUR HONOR, COUNSEL OBJECTED
10 TO ANY SUBMISSION OF THE LETTER BY JUDGE ALTMAN TO
11 BOTH OF US OR THE DECLARATION UNTIL THIS COURT
12 RULED. THEY HAVE A 703.5 OBJECTION, I BELIEVE,
13 BECAUSE THEY HAVE ALLEGED MISCONDUCT AND THEY HAVE
14 ACTUALLY ALLEGED A VIOLATION OF STANDARD 12, THEY
15 HAVE ALLEGED JUDGE ALTMAN VIOLATED STANDARD 12 OF
16 THE JUDICIAL COUNCIL'S ETHICAL STANDARDS FOR
17 ARBITRATORS.

18 THE COURT: WHERE IS THAT?

19 MR. GREENBERG: PAGE 10, FOOTNOTE 4, OF THEIR
20 ORIGINAL FILING.

21 THE COURT: I AM SORRY, GIVE ME THE NAME OF
22 THE DOCUMENT. I AM --

23 MR. GREENBERG: YOUR HONOR, MAY I JUST
24 PROVIDE YOU MY COPY.

25 THE COURT: JUST TELL ME WHAT IT IS.

26 MR. GREENBERG: IT'S PLAINTIFFS RESPONSE TO
27 PETITION TO CONFIRM ARBITRATION AWARD AND REQUEST
28 TO VACATE AWARD.

1 THE COURT: YOU SAY FOOTNOTE 5?

2 MR. GREENBERG: FOOTNOTE 4, YOUR HONOR.

3 THE COURT: OH.

4 MR. GREENBERG: WHAT 703.5 SAYS IS THAT:
5 "THE ARBITRATOR MAY NOT PROVIDE TESTIMONY UNLESS
6 THE EXCEPTION IS IF THE ALLEGED MISCONDUCT COULD
7 GIVE RISE TO AN INVESTIGATION BY THE JUDICIAL
8 COMMISSION," AND IN THIS CASE, BY THE STATE BAR OR
9 COMMISSION ON JUDICIAL PERFORMANCE.

10 THE COURT: WHERE ARE YOU FINDING THIS?

11 MR. GREENBERG: THIS IS 703.5 OF THE EVIDENCE
12 CODE. THAT IS WHAT THEY HAVE QUOTED TO ME IN
13 LETTERS AND COMMUNICATIONS SAYING I CAN'T SUBMIT
14 ANYTHING FROM JUDGE ALTMAN.

15 THE COURT: IS THAT IN THIS 703.5; IS THAT
16 CITED HERE?

17 MR. GREENBERG: 703.5 IS CITED IN THEIR BRIEF
18 THAT WAS FILED YESTERDAY.

19 THE COURT: WELL, THAT IS TOO LATE, I DIDN'T
20 READ THAT.

21 MR. GREENBERG: OKAY. WELL, I CAME TO THE
22 COURT YESTERDAY, YOUR HONOR, AND I ASKED YOUR
23 CLERK, I SAID, "LOOK I HAVE GOT THIS PROBLEM, JUDGE
24 ALTMAN TOLD US BOTH TO SUBMIT THIS LETTER TO THE
25 COURT, BUT I KNOW THERE IS AN OBJECTION."

26 SHE SAID, "WELL, BRING IT WITH YOU
27 TOMORROW." THAT IS WHAT I HAVE DONE. I DIDN'T
28 JUST WANT TO FILE IT AND HAVE IT BEFORE THE COURT

1 WHEN I KNOW THERE IS AN OBJECTION.

2 MR. JOHNSON: LET ME ADDRESS ONE ISSUE.

3 THE COURT: THIS IS ASTONISHING ON YOUR PART,
4 ABSOLUTELY ASTONISHING. JUDGE ALTMAN DIDN'T
5 BELIEVE ANY OF YOUR WITNESSES AND YOU ARE NOW
6 ATTACKING HIS HONESTY?

7 MR. JOHNSON: THAT IS NOT WHAT WE MEANT TO
8 DO.

9 THE COURT: IT IS JUST ASTONISHING. HE IS A
10 VERY RESPECTED JUDGE.

11 MR. JOHNSON: IF I CAN EXPLAIN. WHAT WE DID
12 BY REFERENCING THE JUDICIAL ADMISSION THERE IS
13 SIMPLY TO SAY THAT THAT ECHOES THE LANGUAGE OF
14 703.5. WE ARE NOT ACCUSING JUDGE ALTMAN OF BEING
15 DISHONEST. I KNOW THAT IT MAY SOUND LIKE THAT, BUT
16 WE ARE NOT. WE SIMPLY FEEL THAT THE INTERA MODEL,
17 GIVEN THAT THE LEVEL OF VALUE THAT DR. JACKSON
18 PLACED ON THAT, IT GOES TO THE CENTRAL ISSUE OF THE
19 CASE.

20 IT'S CLEAR JUDGE ALTMAN DIDN'T BELIEVE
21 OUR WITNESSES. BUT IT IS ALSO THE TRUTH THAT THE
22 TECHNICAL ADVISOR SAID THERE ARE CERTAIN ISSUES
23 ABOUT THE DEFENDANTS' MODEL THAT HE FEELS NEEDS
24 CAREFUL CONSIDERATION. ONE OF THOSE IS WHETHER
25 HUNTLEY'S TESTIMONY MADE SENSE. AND THE INTERA
26 MODEL, ACCORDING TO JACKSON, WAS THE ONLY WAY TO DO
27 THAT, AND THAT'S ALL WE ARE TRYING TO SAY IS,
28 "LOOK, IF YOU ARE GOING TO DO THE MODEL, WE

1 CERTAINLY CAN HAVE AN OPPORTUNITY TO CHALLENGE THAT
2 MODEL."

3 WE WERE NOT ADVISED OF IT UNTIL AFTER
4 THE ARBITRATION AWARD. THAT IS ALL WE ARE SAYING
5 HERE. WE ARE NOT ACCUSING JUDGE ALTMAN OF BEING
6 DISHONEST. ALL WE ARE SAYING IS IF THE INTERA
7 MODEL IS HAPPENING, WE WANT AN OPPORTUNITY TO
8 RESPOND TO IT.

9 MR. GREENBERG: HE WROTE A LETTER TO JUDGE
10 ALTMAN AFTER HIS LETTER TO US.

11 THE COURT: IS THIS IN THE RECORD?

12 MR. GREENBERG: I DIDN'T WANT TO DO IT UNTIL
13 THE COURT RULED UNDER 703.5 THAT THIS IS WITHIN THE
14 EXCEPTION TO 703.5 BECAUSE THEY HAVE ALLEGED
15 MISCONDUCT THAT COULD GIVE RISE TO AN INVESTIGATION
16 BY THE JUDICIAL COMMISSION WHETHER HIS TESTIMONY,
17 HIS DECLARATION AND HIS LETTER IS ADMISSIBLE.
18 HIS DECLARATION CLEARLY IS ADMISSIBLE.

19 HE HAS WRITTEN A LETTER TO BOTH OF US
20 AND ASKED AT THE END OF THE LETTER THAT WE SUBMIT
21 IT TO THIS COURT. AND THE LETTER ADDRESSES THE
22 ADMISSIBILITY OF HIS DECLARATION, WHY HE THINKS
23 BECAUSE HIS INTEGRITY HAS BEEN ATTACKED AND THIS
24 COULD GIVE RISE TO AN INVESTIGATION, WHY HIS
25 DECLARATION IS ADMISSIBLE. THAT IS WHY WE HAVE
26 BEEN ASKED TO SUBMIT THAT.

27 THE COURT: WAIT.

28 THE COURT: HOW COULD JUDGE ALTMAN BE THE

1 GOING TO GET YOURSELF MEMBERSHIP OF THE HALL OF
2 INFLAME MAKING A CLAIM LIKE THIS, MR. JOHNSON.

3 MR. JOHNSON: AGAIN, YOUR HONOR, WE ARE NOT
4 SEEKING TO CALL HIM DISHONEST AT ALL. IT'S JUST
5 THAT THE INTERA MODEL, WHEN WE VIEWED IT AND SAW
6 THE WORK THAT HAD BEEN DONE, WE HAD NO IDEA THAT IT
7 HAD BEEN DONE, AND CERTAINLY NOT HAD AN OPPORTUNITY
8 TO MEET IT AND ADDRESS ITS CONCERNS.

9 MR. GREENBERG: YOUR HONOR, WE WERE
10 SPECIFICALLY ASKED BY JUDGE ALTMAN IF THIS COULD BE
11 DONE. WE BOTH SPECIFICALLY STOOD THERE AND SAID
12 YES, AND THAT IS WHAT IS SO INFURIATING TO ME. WE
13 BOTH APPROVED IT.

14 THE COURT: AND THEN COUNSEL CALLED YOU A
15 BLANKETY-BLANK LIAR WHEN THAT OCCURRED.

16 MR. GREENBERG: I UNDERSTAND THAT. BUT HE
17 ADMITS THAT THERE WAS A COLLOQUY. YOU SEE IN HIS
18 DECLARATION THERE WAS NO COLLOQUY.

19 THE COURT: IS THERE A RECORD?

20 MR. GREENBERG: THIS WOULD BE -- THERE IS NO
21 RECORD. ALL WE HAVE TO ESTABLISH A RECORD IS MY
22 DECLARATION, HIS DECLARATION, THE DECLARATION OF
23 CHRIS FINLEY, AND A SEALED DECLARATION OF JUDGE
24 ALTMAN THAT I HAVE HERE.

25 THE COURT: DID YOU SAY THAT COUNSEL WAS A
26 BLANKETY-BLANK LIAR?

27 MR. JOHNSON: WHAT I SAID WAS -- WE HAD A
28 TELEPHONE CONVERSATION WHERE HE TOLD ME HE -- HE

1 COMPLAINED ABOUT THE USE OF -- HE RECEIVED -- WE
2 RECEIVED AN INVOICE FROM INTERA AND MR. GREENBERG
3 CALLED ME AND COMPLAINED ABOUT IT IN TERMS OF THEIR
4 BEING WORK BY HIS STAFF ON THERE, AND THEN I WROTE
5 THIS LETTER WHEN I GOT JUDGE ALTMAN'S LETTER AND I
6 WROTE BACK AND SAID, "JUDGE ALTMAN, WE DIDN'T AGREE
7 TO THIS." AND MARK TOLD ME THAT HE DID NOT HAVE
8 THAT CONVERSATION WITH ME. AND I DID HAVE A
9 CONVERSATION WITH HIM. MY SECRETARY RECALLS ME
10 HAVING A CONVERSATION WITH HIM ON A SPEAKER PHONE,
11 AND I TOLD HIM "YOU ARE LYING."

12 MR. GREENBERG: WE HAD THE CONVERSATION
13 ABSOLUTELY. I SAID, "HOW MANY HOURS WAS PUT IN
14 HERE, IT IS A LOT OF MONEY?" I NEVER SAID IT WAS
15 UNAUTHORIZED. IF HE THOUGHT -- IF HE THOUGHT THAT
16 IT WAS UNAUTHORIZED HOURS OF WORK AND IN HIS MIND
17 HE THINKS I EVEN AGREE, HE HAS GOT EIGHT DAYS TO
18 CALL JUDGE ALTMAN AND SAY, "JUDGE, YOU KNOW WHAT,
19 YOU SHOULDN'T RELY WHATEVER ON THIS GUY." THAT IS
20 A WAIVER. THE SUPREME COURT SAYS THAT IS A WAIVER.
21 YOU HAD YOUR OPPORTUNITY, YOU DON'T GET TO GO BACK
22 AND SEE WHAT IT LOOKS LIKE.

23 I THINK THE COURT OUGHT TO MAKE A
24 FINDING ON WAIVER AS WELL, THAT HE WAIVED THIS
25 OBJECTION. HE KNEW ABOUT THIS. IF HE TRULY
26 THOUGHT THAT I WAS IN AGREEMENT, WHAT A BETTER
27 REASON THAN TO GO AND SAY, "YOU KNOW WHAT, JUDGE
28 ALTMAN, PLEASE DON'T CONSIDER THAT, HE HAS GOT

1 EIGHT DAYS LEFT IN DRAFTING YOUR AWARD." WE DON'T
2 KNOW THERE IS EIGHT DAYS, WE KNEW THERE WAS TIME,
3 IT WASN'T OUT THERE."

4 MR. JOHNSON: ON THAT ISSUE, I DIDN'T SAY
5 ANYTHING ABOUT WHAT THE MAN DID. I HAD NO IDEA
6 WHAT HE DID.

7 MR. GREENBERG: YOUR HONOR, HE ADMITS NOW
8 THAT THERE WAS A COLLOQUY WITH JUDGE ALTMAN ON THIS
9 WORK. AND HE SAYS, "WELL, I DIDN'T KNOW THE SCOPE
10 OR WHO ELSE WAS GOING TO WORK ON IT." WHY WOULD
11 JUDGE ALTMAN ASK US PERMISSION IF IT WASN'T GOING
12 TO BE SOMETHING BEYOND THE NORMAL REVIEW BY
13 DR. JACKSON THAT HE DID EVERYDAY? HE IS ADMITTING
14 THAT THERE WAS AN INQUIRY BY THE JUDGE OF WHETHER
15 SOMETHING COULD BE DONE.

16 JUDGE ALTMAN WOULD NOT EVEN HAVE HAD TO
17 MAKE THAT INQUIRY IF ALL IT WAS GOING TO BE IS
18 DR. JACKSON TAKING A LOOK AT THE TESTIMONY ON HIS
19 OWN OVER THE WEEKEND. IT DOESN'T MAKE SENSE. IT
20 ONLY MAKES SENSE WHEN YOU REALIZE THAT THE QUESTION
21 WENT BEYOND THAT AND THAT COUNSEL HAS COMPLETELY
22 LEFT THAT OUT OF HIS DECLARATION BECAUSE HE KNEW
23 ABOUT 703.5 AND FIGURED THAT YOU ARE NEVER GOING TO
24 KNOW WHAT REALLY HAPPENED FROM JUDGE ALTMAN.

25 MR. JOHNSON: YOUR HONOR, THE FACT IS
26 DR. JACKSON WAS GOING TO REVIEW DR. HUNTLEY'S WORK.
27 I DID NOT VIEW THAT AS BEING ANYTHING OUT OF THE
28 ORDINARY AT ALL. LIKE I SAID, THE ONLY THING WE

1 ARE COMPLAINING ABOUT IS THE INTERA MODEL. WHEN WE
2 SAW THAT, THAT SEEMS TO BE BEYOND THE SCOPE OF WHAT
3 WE HAD DEALT WITH. IT SEEMED TO BE AN INDEPENDENT
4 ANALYSIS BY THE TECHNICAL ADVISOR THAT THE PARTIES
5 HAD SAID SPECIFICALLY REQUESTED THAT THE TECHNICAL
6 ADVISOR NOT PERFORM.

7 MR. GREENBERG: IT DOESN'T MAKE ANY SENSE.
8 WHY WOULD JUDGE ALTMAN HAVE TO ASK OUR PERMISSION
9 IF IT WAS GOING TO BE THE STANDARD EVERYDAY REVIEW
10 BY DR. JACKSON. HE ADMITS PERMISSION WAS ASKED.
11 WHY WOULD THAT BE NECESSARY?

12 THE COURT: POINT ME TO THE DECLARATION.

13 MR. GREENBERG: OF WHO'S DECLARATION?

14 THE COURT: ALL OF THE ONES YOU RELY UPON AT
15 THIS POINT.

16 MR. GREENBERG: MY DECLARATION AND CHRIS
17 FINLEY'S DECLARATION.

18 THE COURT: MAKE A FULL PRESENTATION TO ME
19 ABOUT WHY I SHOULDN'T BELIEVE OPPOSING COUNSEL'S
20 DECLARATION. SHOW ME THE PARAGRAPHS.

21 MR. GREENBERG: MY DECLARATION IT IS PAGE 5
22 OF PARAGRAPH 11.

23 THE COURT: WHAT IS YOUR FILING DATE HERE?

24 MR. GREENBERG: JULY 7, YOUR HONOR.

25 THE COURT: PAGE 5, PARAGRAPH 11.

26 MR. GREENBERG: YES. ADDITIONALLY, IT WOULD
27 BE CHRIS FINLEY'S DECLARATION --

28 THE COURT: WAIT A MINUTE.

1 THE COURT: FINLEY, YOU SAID?

2 MR. GREENBERG: YES, CHRIS FINLEY'S
3 DECLARATION FILED THE SAME TIME, PAGE 3, PARAGRAPH
4 10.

5 THE COURT: OKAY. AND WHAT ELSE?

6 MR. GREENBERG: YOUR HONOR, ADDITIONAL
7 EVIDENCE WOULD BE WHAT THE COURT HAS YET TO RULE
8 ON.

9 THE COURT: YOU SAID BY REVIEWING OPPOSING
10 COUNSEL'S DECLARATION.

11 MR. GREENBERG: WELL, HE NEVER MENTIONS THAT
12 THERE WAS A DISCUSSION WHATSOEVER DURING THE
13 ARBITRATION.

14 THE COURT: THE PARAGRAPHS.

15 MR. GREENBERG: WELL, IT JUST DOESN'T EXIST.
16 THERE IS NO -- HE NEVER SAYS THAT THERE WAS EVER
17 THIS COLLOQUY. WHAT HE DOES, YOUR HONOR --

18 THE COURT: WELL, WAIT A MINUTE. THE FILING
19 SUBSEQUENT TO YOURS?

20 MR. GREENBERG: THE FILING SUBSEQUENT TO --

21 THE COURT: WHAT IS THAT CALLED?

22 MR. JOHNSON: CALLED SFPP'S RESPONSE, I
23 BELIEVE, YOUR HONOR.

24 MR. GREENBERG: I THINK --

25 MR. JOHNSON: IT IS ATTACHED TO IT.

26 THE COURT: FILED JULY 10?

27 MR. JOHNSON: YES, YOUR HONOR.

28 THE COURT: WHAT IS YOUR POINT ABOUT THIS

1 DECLARATION?

2 MR. GREENBERG: WELL, YOUR HONOR, MY POINT IS
3 IN HIS ORIGINAL ARGUMENTS TO THIS COURT, HE DOESN'T
4 EVEN TELL YOU THAT THERE IS A COLLOQUY, DOESN'T
5 EVEN TELL YOU THAT JUDGE ALTMAN BROUGHT IT UP AND
6 ASKED FOR PERMISSION FOR ANYTHING.

7 HE WRITES ME A LETTER AND SAYS "703.5
8 THIS, AND THE HEARSAY RULES PREVENT YOU TELLING
9 JUDGE DAU WHAT HAPPENED EITHER." NOW, I HAVE AN
10 INDICATION RIGHT HERE THAT I CAN PROVIDE THE COURT,
11 CARROW (REPORTER SPELLING) VS. SMITH, WHICH IS
12 CITED IN THE ANNOTATED CODE UNDER 703.5, WHICH VERY
13 CLEARLY STATES IN AN ARBITRATION CASE THAT 703.5,
14 WHAT THEY SAY IS:

15 "THIS IS ANOTHER CASE
16 WHERE AN ATTORNEY IS
17 CHALLENGING THE
18 ADMISSIBILITY OF EVIDENCE
19 AND WHAT WENT ON ON THE
20 BASIS OF HEARSAY AND
21 EVIDENCE CODE 703.5.

22 "TO PUT IT MILDLY AS
23 WE CAN, THEY ARE WRONG
24 AGAIN. THE ARBITRATOR'S
25 COLLOQUY WAS OFFERED TO
26 SHOW NOTICE, NOT FOR THE
27 TRUTH OF THE MATTER
28 ASSERTED."

1 IT GOES ON WHY THIS IS ADMISSIBLE AND
2 WHY 703.5 ONLY MENTIONS WHETHER OR NOT THE
3 ARBITRATOR CAN TESTIFY. CERTAINLY IT HAS NOTHING
4 TO DO WITH WHETHER OR NOT I CAN TELL YOU WHAT
5 HAPPENED DURING THAT HEARING. HERE HE IS WRITING A
6 LETTER TO ME TELLING ME I CAN'T TELL YOU WHAT
7 HAPPENED, THAT I CAN'T EVEN MENTION THIS COLLOQUY
8 WITH JUDGE ALTMAN.

9 THE COURT: THAT IS NOT SOMETHING I HAVE;
10 RIGHT?

11 MR. GREENBERG: I HAVE GOT THE LETTER RIGHT
12 HERE, AND I HAVE GOT CARROW VS. SMITH RIGHT HERE.
13 HE IS TRYING TO SILENCE ME AND SILENCE ANY EVIDENCE
14 TO THIS COURT OF WHAT WENT ON.

15 THE COURT: YOU HAD ALREADY SAID WHAT WENT
16 ON.

17 MR. JOHNSON: THAT'S TRUE, YOUR HONOR. AND
18 YOUR HONOR, ON THE HEARSAY ISSUE, THE TRABUCO CASE,
19 T-R-A-B-U-C-O, SAYS THAT HEARSAY STATEMENTS ARE
20 LIKELY INADMISSIBLE UNDER 703.5.

21 MR. GREENBERG: YOUR HONOR, LET'S TAKE --

22 THE COURT: HEARSAY STATEMENTS, WHAT ARE YOU
23 TALKING ABOUT?

24 MR. JOHNSON: THE STATEMENTS BY COUNSEL THAT
25 ARE IN THE RECORD ALREADY AS TO WHAT JUDGE ALTMAN
26 SAID.

27 THE COURT: THAT IS NOT A HEARSAY STATEMENT.

28 MR. JOHNSON: THE TRABUCO CASE --

1 THE COURT: IT IS NOT OFFERED FOR THE TRUTH
2 OF WHAT JUDGE ALTMAN SAID, IT'S OFFERED TO SHOW
3 WHAT JUDGE ALTMAN SAID. THAT'S NOT HEARSAY.

4 MR. GREENBERG: ALSO OFFERED TO SHOW THAT HE
5 HAD NOTICE AND WHAT WAS SAID, THE LETTER THAT SAYS
6 "DON'T FILE ANYTHING THAT WILL TELL JUDGE DAU WHAT
7 HAPPENED." AND I HAVE TRABUCO AND CARROW VS.
8 SMITH, THEY ARE HIGHLIGHTED. I CAN SHOW YOU WHY
9 TRABUCO SAYS HEARSAY IS NOT ADMISSIBLE AND --

10 THE COURT: WHERE IS THE HEARSAY HERE?

11 MR. GREENBERG: HE IS CLAIMING THAT ME
12 TELLING YOU WHAT HAPPENED DURING THE ARBITRATION IS
13 HEARSAY AND THAT I AM PROHIBITED FROM DOING SO
14 UNDER 703.5 AS WELL. HE IS TRYING TO SILENCE ME.

15 MR. JOHNSON: IF I CAN FRAME THE ISSUE HERE.
16 THE ISSUE CAME UP AS FOLLOWS. MR. GREENBERG WAS
17 TELLING ME HE WAS GOING TO USE A LETTER FROM JUDGE
18 ALTMAN ABOUT WHAT HAPPENED AND I VIEWED THAT TO BE
19 A 703.5 PROBLEM, THE ARBITRATOR'S DISCUSSIONS, WHAT
20 HE DID, AND THAT IS WHAT I CONTEND IS THE 703.5
21 PROBLEM.

22 MR. GREENBERG: LET ME SHOW YOU WHAT HE IS
23 TALKING ABOUT. THAT IS ABSOLUTELY WRONG. MAY I?

24 THE COURT: ALL RIGHT. YOU ARE HANDING ME A
25 JULY 3 LETTER FROM MR. JOHNSON TO YOURSELF?

26 MR. GREENBERG: YES. AND MR. JOHNSON HAS ALL
27 OF THESE IN THE SAME PACKET THAT YOU HAVE THERE,
28 THE LETTER BEFORE THAT TO ME TELLS ME THAT I CAN'T

1 SUBMIT ANYTHING TO CLAIM ANYTHING FROM JUDGE
2 ALTMAN.

3 MR. JOHNSON: THERE WAS TWO LETTERS ON THE
4 TOPIC. I MAY HAVE GOTTEN THE DATES WRONG.

5 THE COURT: WELL, I DON'T THINK ANY STATEMENT
6 BY JUDGE ALTMAN WOULD COME WITHIN 703.5.

7 MR. GREENBERG: OKAY. MAY I PROVIDE THE
8 COURT --

9 THE COURT: BECAUSE THE STATEMENTS THAT YOU
10 CITE IN YOUR DECLARATION BY JUDGE ALTMAN COULD NOT
11 GIVE RISE TO ANY OF THESE THINGS MENTIONED IN
12 703.5.

13 MR. GREENBERG: 703.5 GOES ONLY TO WHETHER OR
14 NOT JUDGE ALTMAN CAN STAND BEFORE YOU OR PROVIDE A
15 DECLARATION, NOT WHETHER I CAN SAY WHAT JUDGE
16 ALTMAN SAID DURING THE HEARING.

17 THE COURT: I AGREE.

18 MR. GREENBERG: WHAT HIS LETTER SAYS, I DON'T
19 GET TO TELL YOU WHAT HAPPENED AND HE IS SAYING
20 TRABUCO SAYS IT'S HEARSAY, AND I HAVE TRABUCO AND I
21 CAN SHOW YOU THE REFERENCE THAT --

22 THE COURT: YOU ARE ASKING FOR JUDGE ALTMAN
23 TO TESTIFY?

24 MR. GREENBERG: I AM ASKING FOR JUDGE
25 ALTMAN -- FOR THE COURT TO CONSIDER A DECLARATION
26 FROM JUDGE ALTMAN AS TO WHETHER OR NOT HE ASKED FOR
27 PERMISSION AND WHETHER OR NOT IT WAS GRANTED. IF
28 THE COURT BELIEVES WE ARE NOT WITHIN THE EXCEPTION,

1 THEN IT WILL STAY IN THIS SEALED ENVELOPE.

2 THE COURT: JUDGE ALTMAN'S STATEMENT
3 ACCORDING TO THE --

4 MR. GREENBERG: IT IS THE MISCONDUCT, IT IS
5 WHETHER HIS CONDUCT COULD GIVE RISE AND WHAT THE
6 ALLEGED CONDUCT IS HE EXCEEDED HIS AUTHORITY AS AN
7 ARBITRATOR IN VIOLATION OF HIS DUTIES AND IN
8 VIOLATION OF THE STANDARD 12. IT'S NOT THE
9 STATEMENTS THAT GIVES RISE, IT'S WHETHER HIS
10 CONDUCT WOULD GIVE RISE. THERE IS ALSO AN ISSUE OF
11 WHETHER OR NOT --

12 THE COURT: TO GET INTO THIS IS DISTASTEFUL
13 BEYOND BELIEF.

14 MR. GREENBERG: WELL, YOUR HONOR, I THINK
15 THAT THE COURT CAN MAKE THE FINDINGS THAT IT
16 ALREADY HAS.

17 THE COURT: IS HE OBJECTING TO RECEIPT OF A
18 DECLARATION BY JUDGE ALTMAN?

19 MR. JOHNSON: YOUR HONOR, I THINK THAT DOES
20 VIOLATE 703.5, YES.

21 THE COURT: AND TELL ME HOW IT DOES?

22 MR. JOHNSON: BECAUSE THE DECLARATION, IT GOES
23 TO THE THOUGHT PROCESS AND MERITS, IT IS NOT WITHIN
24 THE EXCEPTION AS YOU POINTED OUT. AGAIN, WE ARE
25 NOT ALLEGING -- WE ARE ALLEGING THAT HE EXCEEDED
26 HIS AUTHORITY UNDER 1282.2.

27 THE COURT: HAVE YOU SEEN HIS STATEMENT?

28 MR. JOHNSON: YES, I HAVE, YOUR HONOR.

1 THE COURT: WELL, IT JUST HAS TO BE IN THE
2 NATURE OF AN OFFER OF PROOF, DOESN'T IT? HOW CAN I
3 TELL IF IT WOULD VIOLATE 703.5 UNLESS I SEE IT.

4 MR. GREENBERG: BECAUSE IT IS A QUESTION OF
5 IF HE EXCEEDED HIS AUTHORITY -- IF HE IN -- JUDGE
6 ALTMAN IN HIS DECLARATION IS GOING TO TELL YOU WHAT
7 HAPPENED, NOT HIS THOUGHT PROCESS, BUT WHAT
8 HAPPENED. ONE OF US ISN'T TELLING YOU THE TRUTH.
9 HE IS GOING TO TELL YOU WHAT HE RECALLS.

10 FOR HIM TO HAVE ALLOWED HIS TECHNICAL
11 ADVISOR TO GO OFF AND DO THIS WORK AND RELY ON IT,
12 THEY SAY IS IMPROPER AND VIOLATED HIS CANONS OF
13 ETHICS, AND SO THAT POSSIBLY CAN GIVE RISE TO AN
14 INVESTIGATION. I THINK IT COULD POSSIBLY GIVE RISE
15 TO AN INVESTIGATION.

16 BUT MR. JOHNSON'S CONDUCT IN THIS WHOLE
17 NOTION OF WHO IS TELLING THE TRUTH, COULD IT GIVE
18 RISE TO A CONTEMPT? YES, IT CONCEIVABLY COULD IF
19 THE COURT WOULD FIND THAT HIS DECLARATION IS
20 MISLEADING.

21 MR. JOHNSON: YOUR HONOR, ON THAT POINT, THE
22 GROUNDS FOR RETURNING THE ARBITRATION AWARD ARE
23 VERY NARROW. THIS COULD GIVE RISE TO AN
24 INVESTIGATION. IT COULD BE READ TO ESSENTIALLY
25 MEAN THAT 703.5 HAS NO MEANING BECAUSE, AS COUNSEL
26 HAS POINTED OUT, THERE IS A WHOLE HOST OF CONDUCT
27 THAT COULD POTENTIALLY GIVE RISE TO AN
28 INVESTIGATION.

1 MR. GREENBERG: NOT WHEN YOU ALLEGE
2 MISCONDUCT.

3 MR. JOHNSON: HERE YOU HAVE ALREADY FOUND
4 THAT HE IS NOT A MEMBER OF THE STATE BAR AND THERE
5 IS NO EVIDENCE THAT HE IS SUBJECT TO JUDICIAL
6 REVIEW.

7 THE COURT: WELL, I DON'T KNOW.

8 MR. GREENBERG: HE BELIEVES HE IS.

9 THE COURT: THE ISSUE I HAVE IS AN ISSUE THAT
10 I HAVE NEVER HAD TO EXAMINE, BUT I WOULD BE
11 SURPRISED TO FIND THE COMMISSION ON JUDICIAL
12 PERFORMANCE EXTENDS TO RETIRED JUDGES.

13 MR. GREENBERG: WELL, YOUR HONOR, THAT IS A
14 QUESTION THAT JUDGE ALTMAN IS STANDING BY PHONE AND
15 WILLING TO TALK TO THE COURT. WE COULD CALL HIM
16 AND ASK HIM THAT QUESTION IF THAT WOULD HELP YO
17 MAKE THE EVIDENTIARY DETERMINATION.

18 THE COURT: I DON'T WANT TO GET INTO THIS. I
19 THINK THE TENTATIVE THAT I HAVE GIVEN YOU RESOLVES
20 THE MATTER.

21 MR. GREENBERG: IT DOES.

22 THE COURT: GET YOURSELF UP TO THE COURT OF
23 APPEAL IF YOU DON'T LIKE IT.

24 MR. GREENBERG: IT DOES, YOUR HONOR, AND WE
25 WILL BE ADDRESSING THESE ISSUES.

26 THE COURT: HAVE A NICE DAY.

27 MR. JOHNSON: THANK YOU, YOUR HONOR.

28 THE COURT: I AM GOING TO BE ISSUING AN ORDER

1
2 **ORIGINAL FILED**

3 OCT 31 2003

4 **LOS ANGELES**
5 **SUPERIOR COURT**
6

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8 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
9 **FOR THE COUNTY OF LOS ANGELES**
10

11
12 **TEXACO REFINING AND**
13 **MARKETING, INC., etc., et al.,**

14 **Petitioners,**

15 **vs.**

16 **SFPP, L.P., etc.,**

17 **Respondent.**
18

CASE NO. BS083707

JUDGMENT

19 The court having granted the petition of Shell Oil Company, Texaco, Inc., Texaco
20 Refining and Marketing Inc., Equiva Services LLC, and Equilon Enterprises LLC
21 ("petitioners") for confirmation of the arbitration award,

22 **IT IS ORDERED, ADJUDGED, AND DECREED:**

23 1. Shell and Texaco have not breached any provision of their leases, and in the
24 case of Texaco, of its Indenture, and are not obligated to indemnify SFPP or to vacate
25 their properties.

26 2. SFPP, L.P., ("SFPP") is obligated to conduct all the remediation efforts and to
27 comply with all Health Department and Water Board Orders relating to the remediation
28

JUDGMENT

1 of the soil and groundwater at Mission Valley Terminal and Qualcomm Stadium parking
2 lot.

3 3. SFPP is obligated to conduct all future remediation and cleanup work on or
4 under the Shell and Texaco properties and on or under all properties at the Mission
5 Valley Terminal subject to SFPP's control and on or under the entire Qualcomm Stadium
6 parking lot and on or under any locations to which the existing contamination may
7 spread. If, after March 21, 2003 (the date of the arbitrator's award), Shell and/or Texaco
8 should experience a new spill or a new release at the Mission Valley Terminal, then Shell
9 and/or Texaco, as the case may be, shall be obligated to conduct remediation of that spill
10 or release.

11 4. SFPP is obligated to perform the cleanup and abatement described above and
12 to indemnify and hold harmless Texaco and Shell for any liability arising out of SFPP's
13 failure to do the cleanup work and any failure to comply with past or future orders of the
14 Health Department and Water Board related to the cleanup work.

15 5. Petitioners do have and recover judgment against respondent SFPP in the
16 amount of \$1,227,000.00 (consisting of reimbursement of costs previously incurred by
17 petitioners that should have been incurred by SFPP because the costs relate to investiga-
18 tion, remediation and cleanup of the core plume, including a stipulated amount for
19 sanctions), and respondent do have and recover judgment against petitioners in the
20 amount of \$715,000.00 (consisting of costs of future cleanup of the Shell and former
21 Texaco terminal properties and any off-site cleanup costs), resulting in a net amount
22 owed to petitioners by SFPP of \$512,000.00.

23 Dated: October 31, 2003

24 

25 _____
26 Ralph W. Dau, Judge
27
28